



PIONEER

Pioneer Energy Services

RADIAL BOND LOG WITH GAMMA RAY

Company **ANADARKO PETROLEUM CORP.**

Well **UPRR 42 PAN AM V 1**

Field **WATTENBERG**

County **WELD** State **COLORADO**

Location: API #: 0512308416

Other Services

SEC 5 TWP 2N RGE 66W
SW NE 5 2N 66W
SWNE

NONE

Permanent Datum G.L. Elevation 4902'

Log Measured From K.B. 10' Above Perm. Datum

Drilling Measured From K.B. Elevation 4912'

D.F. N/A
G.L. 4902'

Comp. ANADARKO PETROLEUM CORP.
Well UPRR 42 PAN AM V 1
Field WATTENBERG
Co. WELD
State COLORADO

Date of Service JULY 31, 2019

Run Number ONE

Depth Driller or PBTD 7600'

Depth Logger 7010'

Bottom Log Interval 7000'

Top Log Interval SURFACE

Open Hole Size 7 7/8"

Type Fluid H2O

Fluid Level SURFACE

Fluid Density N/A

Max. Recorded Temperature N/A

Max. Wellhead Pressure ZERO

Wellhead Connection PACKOFF

Estimated Cement Top N/A

Unit Number P-135

Wireline Size 9/32"

Location FORT MORGAN

Recorded By DUSTIN MCGEE

Witnessed By JEREMY DUTY

Size

Wt/Ft

Top

Bottom

Tubing Record

Surface Casing 8 5/8"

Production Casing 4 1/2"

Liner Record

8 5/8"

24#

SURFACE

222'

4 1/2"

10.5#

SURFACE

7990'

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
ALL DEPTHS ARE WIRELINE

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew

Engineer: D.MCGEE
Operator: J.MICK
Operator: M. O'DOHERTY
Operator:

Tool Data - Services

SEE DIAGRAM

Serial Number

Log Variables

DatabaseC:\ProgramData\Warrior\Data\anadarko petroleum corp.db
Dataset field/well/run1/pass17/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 150	CASEOD in 4.5	CASETHCK in 0.205	CASEWGHT lb/ft 10.5	MAXAMPL mV 81.2	MINAMPL mV 0.7
MINATTN db/ft 0.08	PERFS 0	PPT usec 250	SRFTEMP degF 85	TDEPTH ft 7000		

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness

CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude
MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation

PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

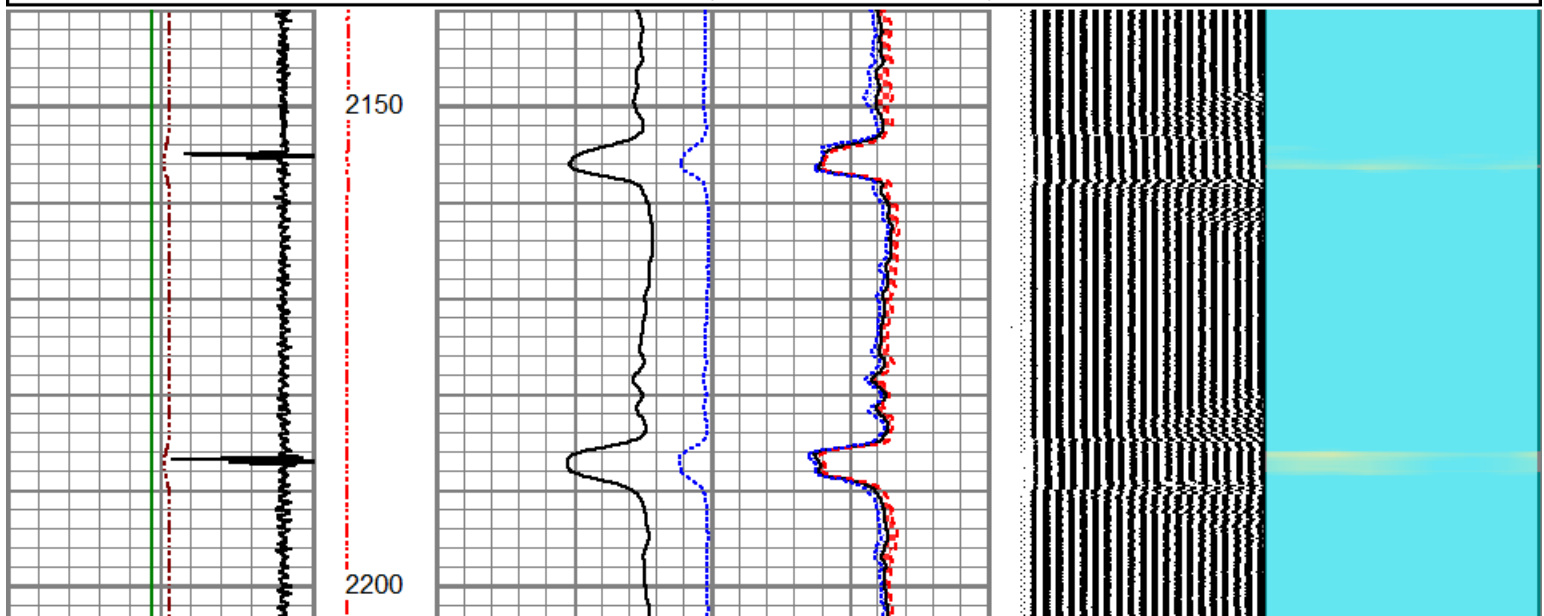


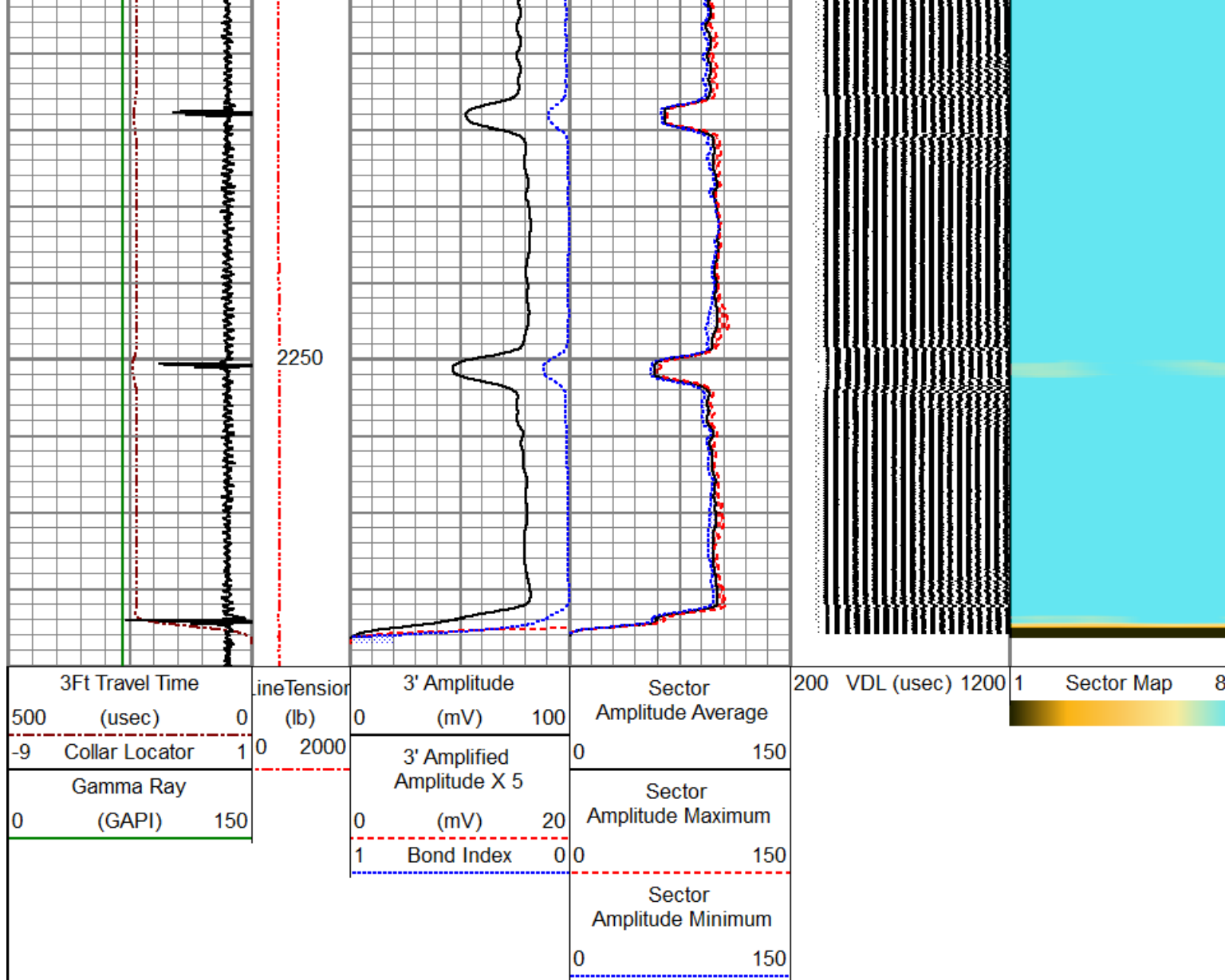
FREE PIPE SECTION


ZERO PSI APPLIED AT SURFACE

Database File anadarko petroleum corp.db
Dataset Pathname pass13
Presentation Format pinr_scbl
Dataset Creation Wed Jul 31 11:09:15 2019
Charted by Depth in Feet scaled 1:240

3Ft Travel Time 500 (usec) -9 Collar Locator Gamma Ray 0 (GAPI) 150	lineTension (lb) 0 2000	3' Amplitude (mV) 0 100 3' Amplified Amplitude X 5 (mV) 0 20 Bond Index 1 0	Sector Amplitude Average 0 150 Sector Amplitude Maximum 0 150 Sector Amplitude Minimum 0 150	200 VDL (usec) 1200 1 Sector Map 8
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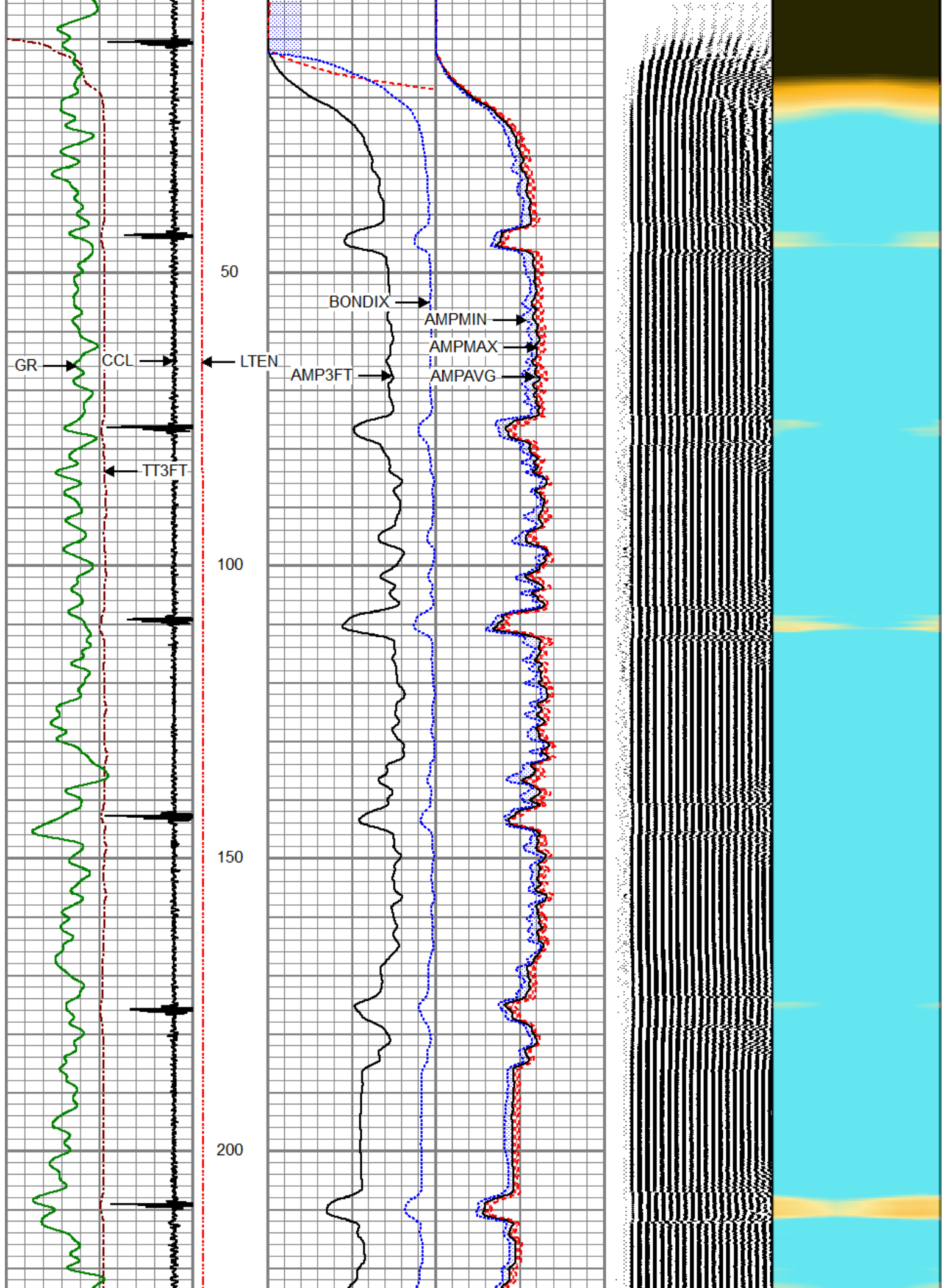
PIONEER
Pioneer Energy Services

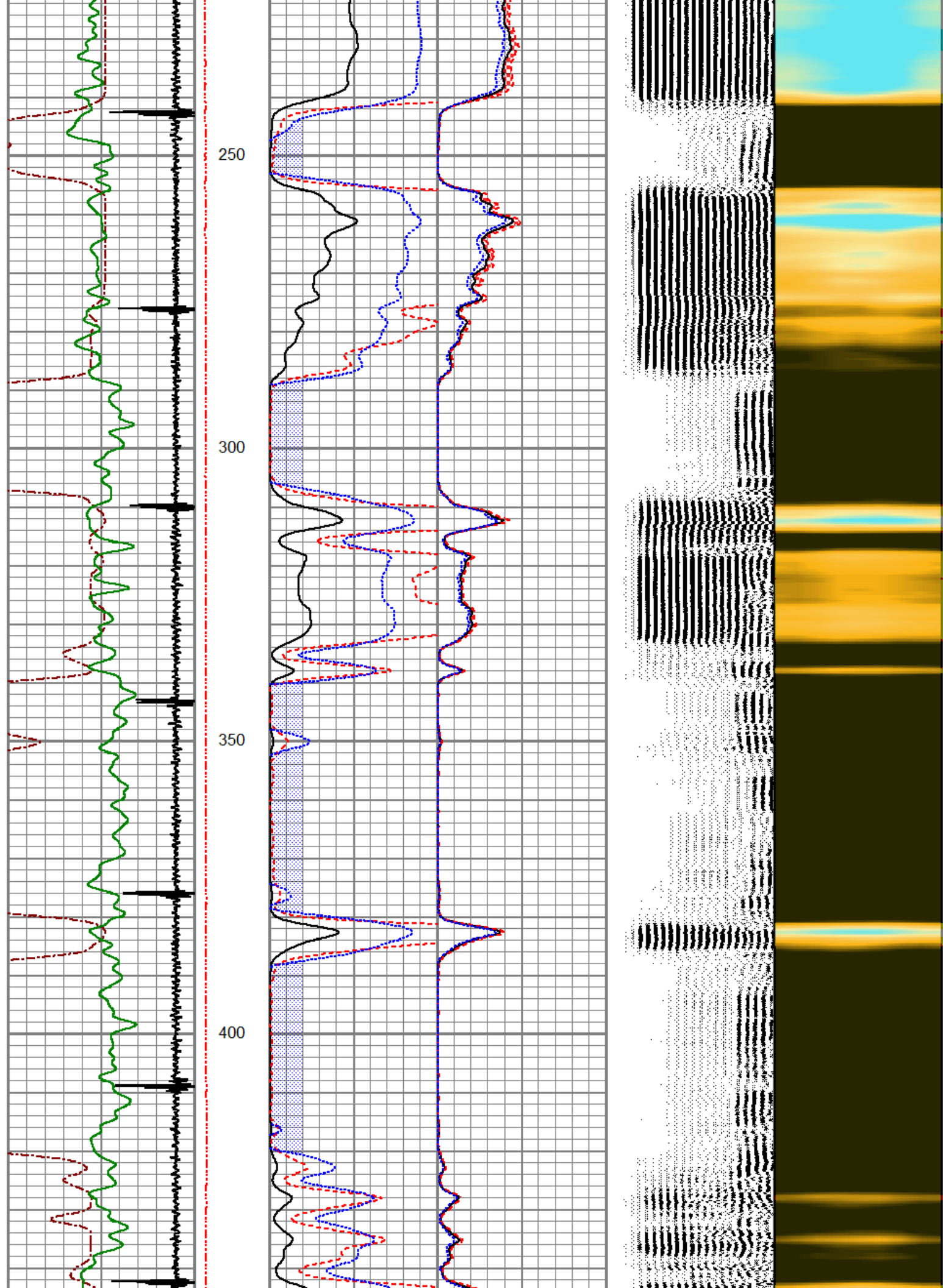
MAIN LOG

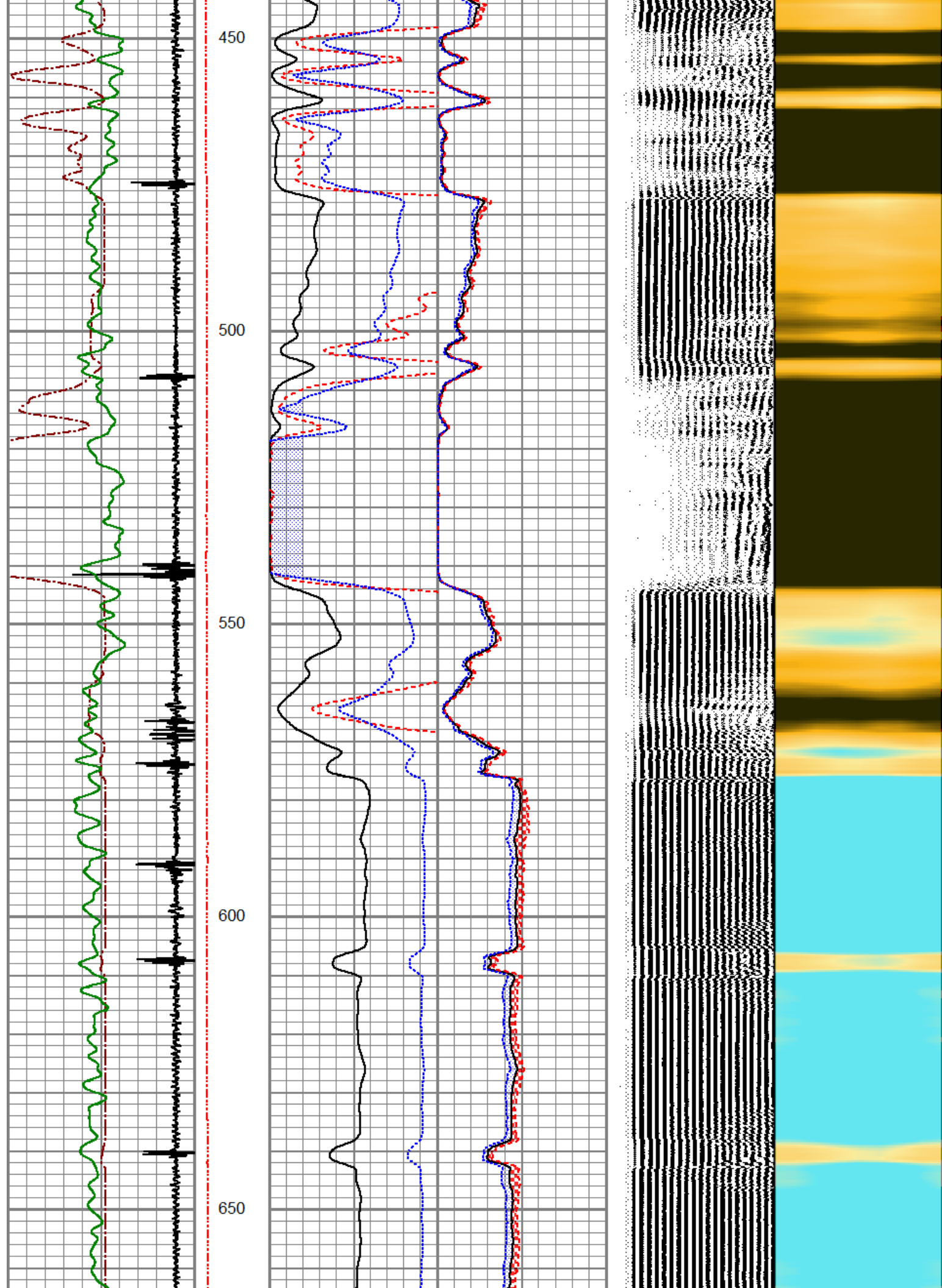
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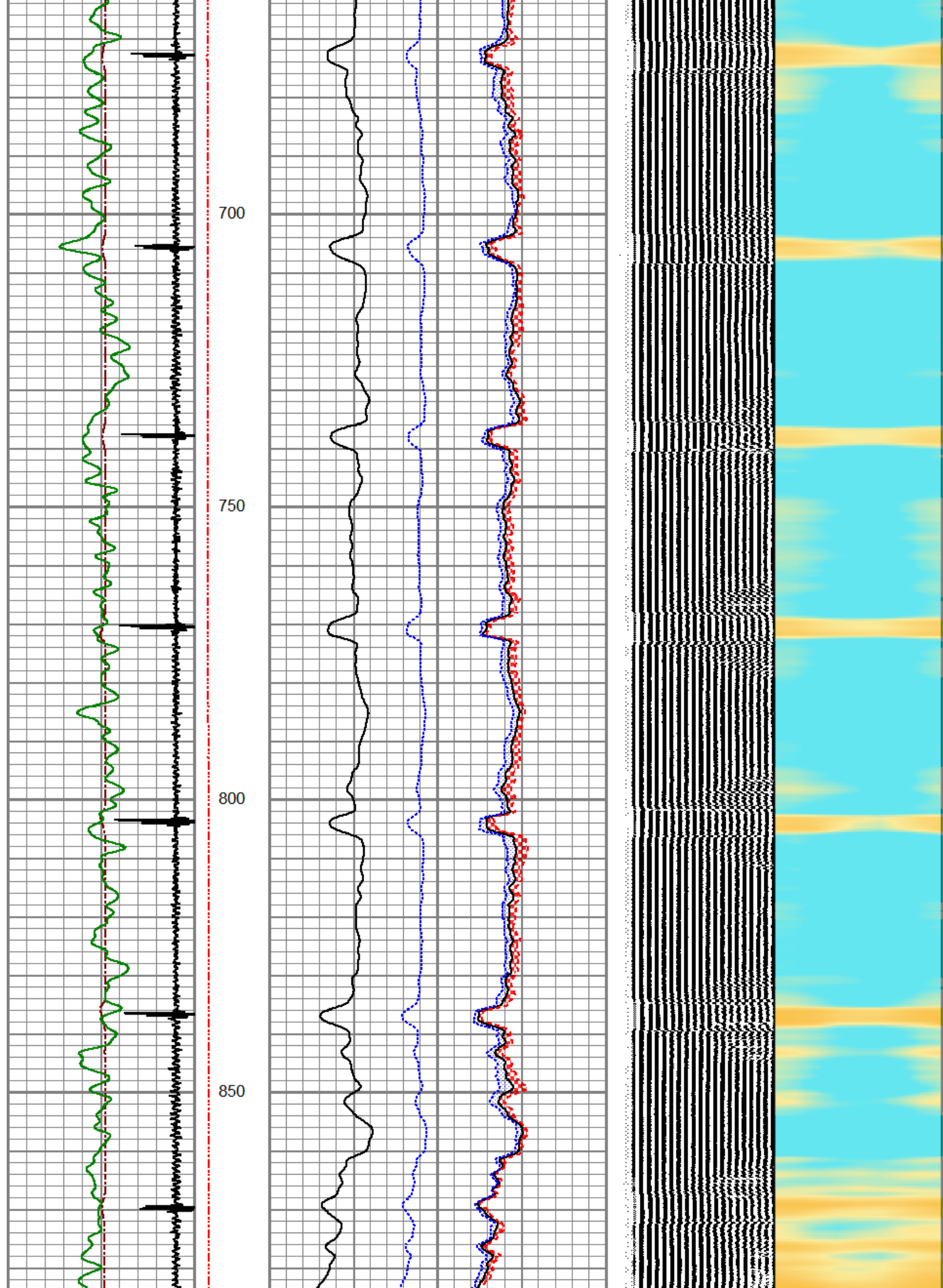
Database File anadarko petroleum corp.db
 Dataset Pathname pass17.3
 Presentation Format pinr_scbl
 Dataset Creation Wed Jul 31 13:03:31 2019
 Charted by Depth in Feet scaled 1:240

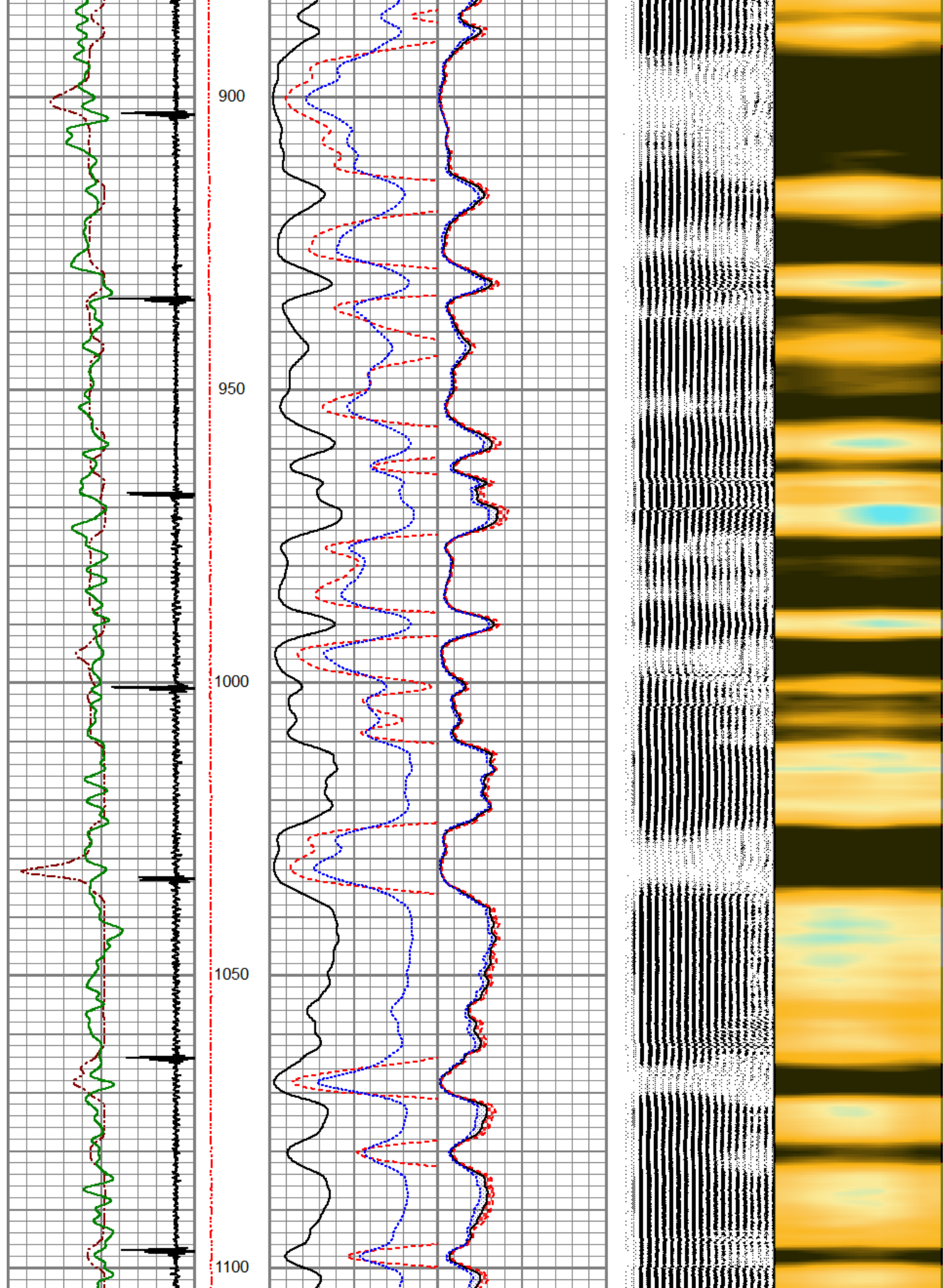
3Ft Travel Time (usec)	0	Line Tension (lb)	0	3' Amplitude (mV)	100	Sector Amplitude Average	200	VDL (usec)	1200	1	Sector Map	8
-9 Collar Locator	1	0	2000	3' Amplified Amplitude X 5 (mV)	20	Sector Amplitude Maximum	0					
Gamma Ray (GAPI)	150			1 Bond Index	0	Sector Amplitude Minimum	0					
							0					
							0					

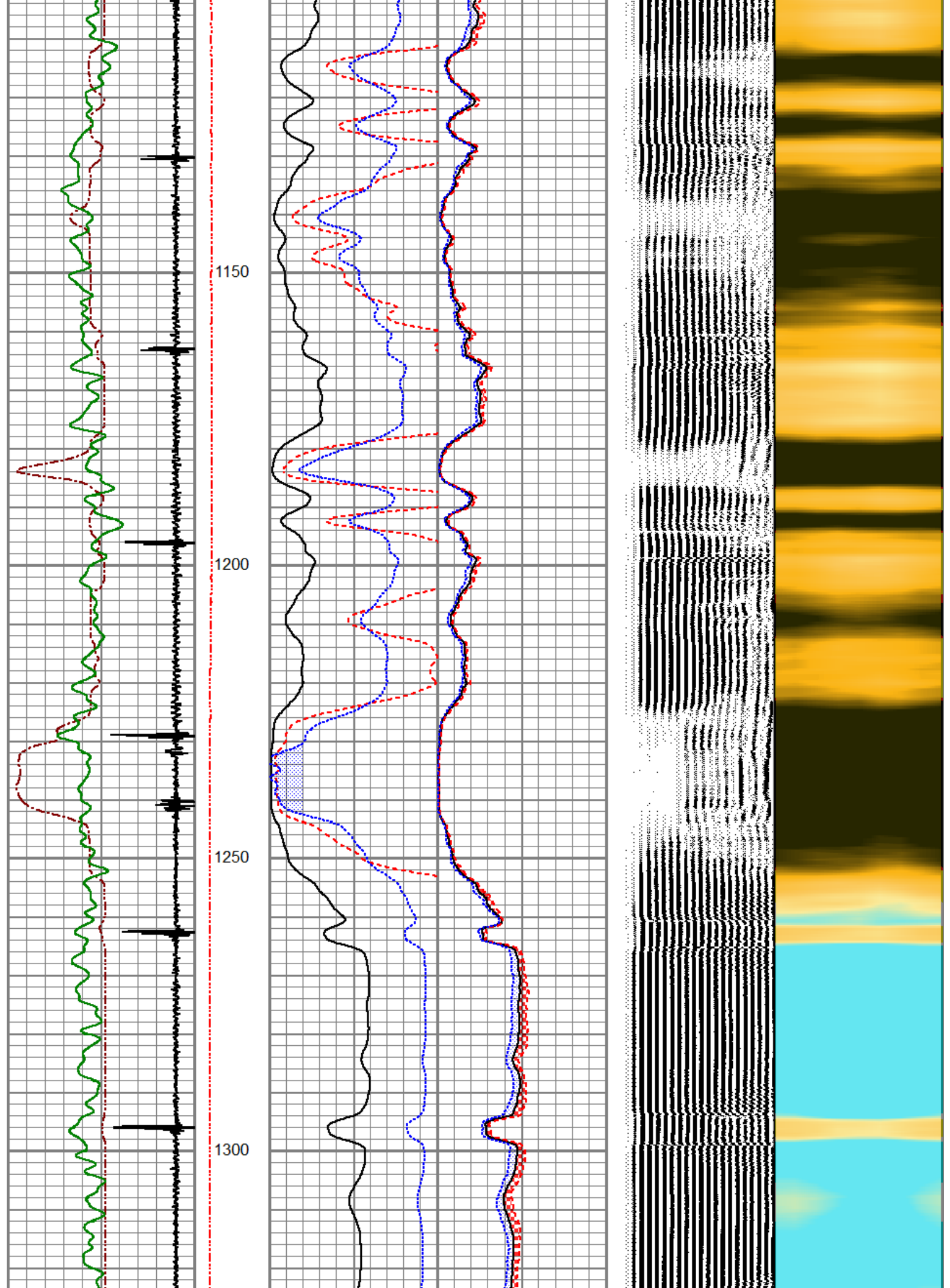


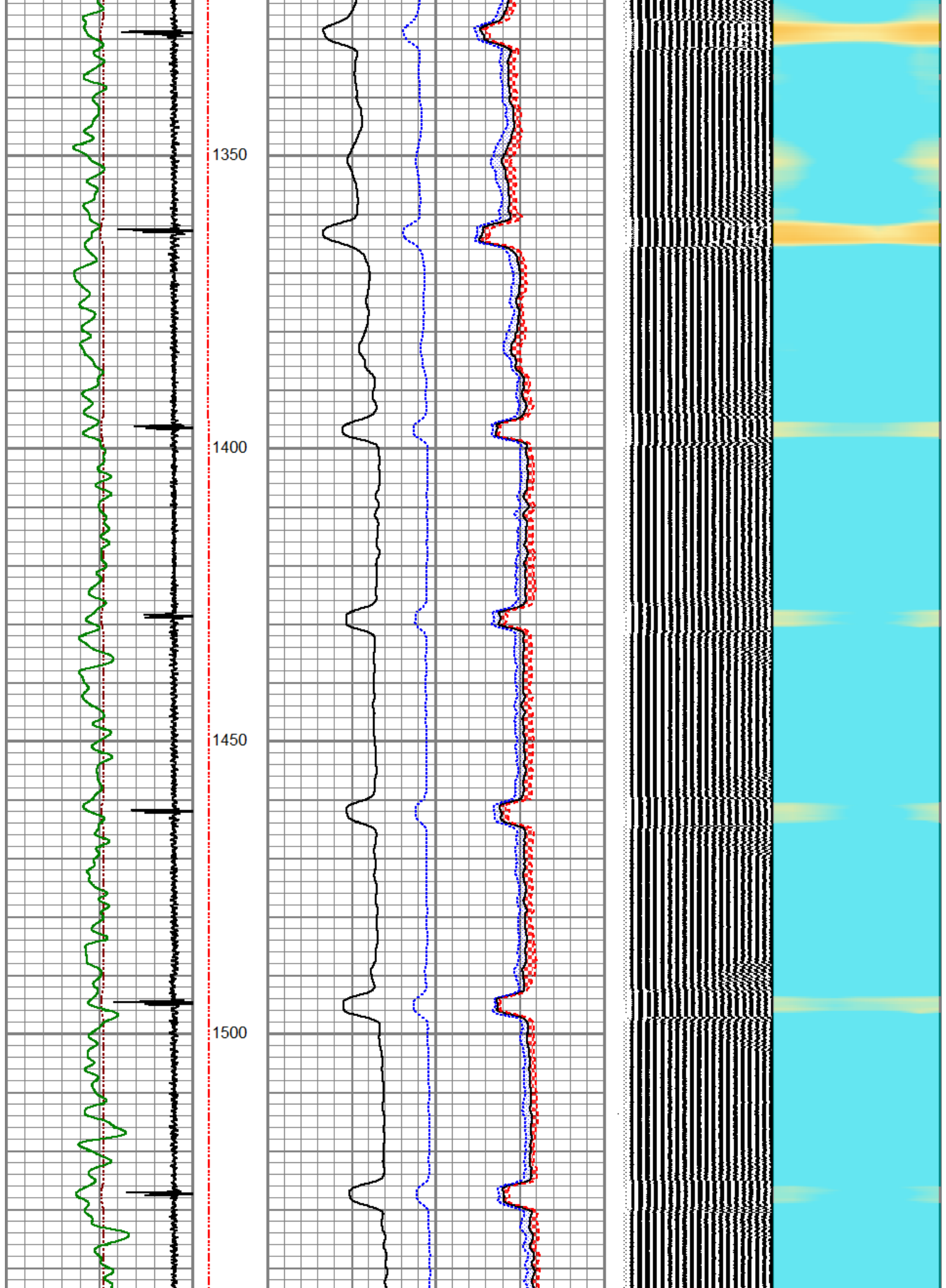


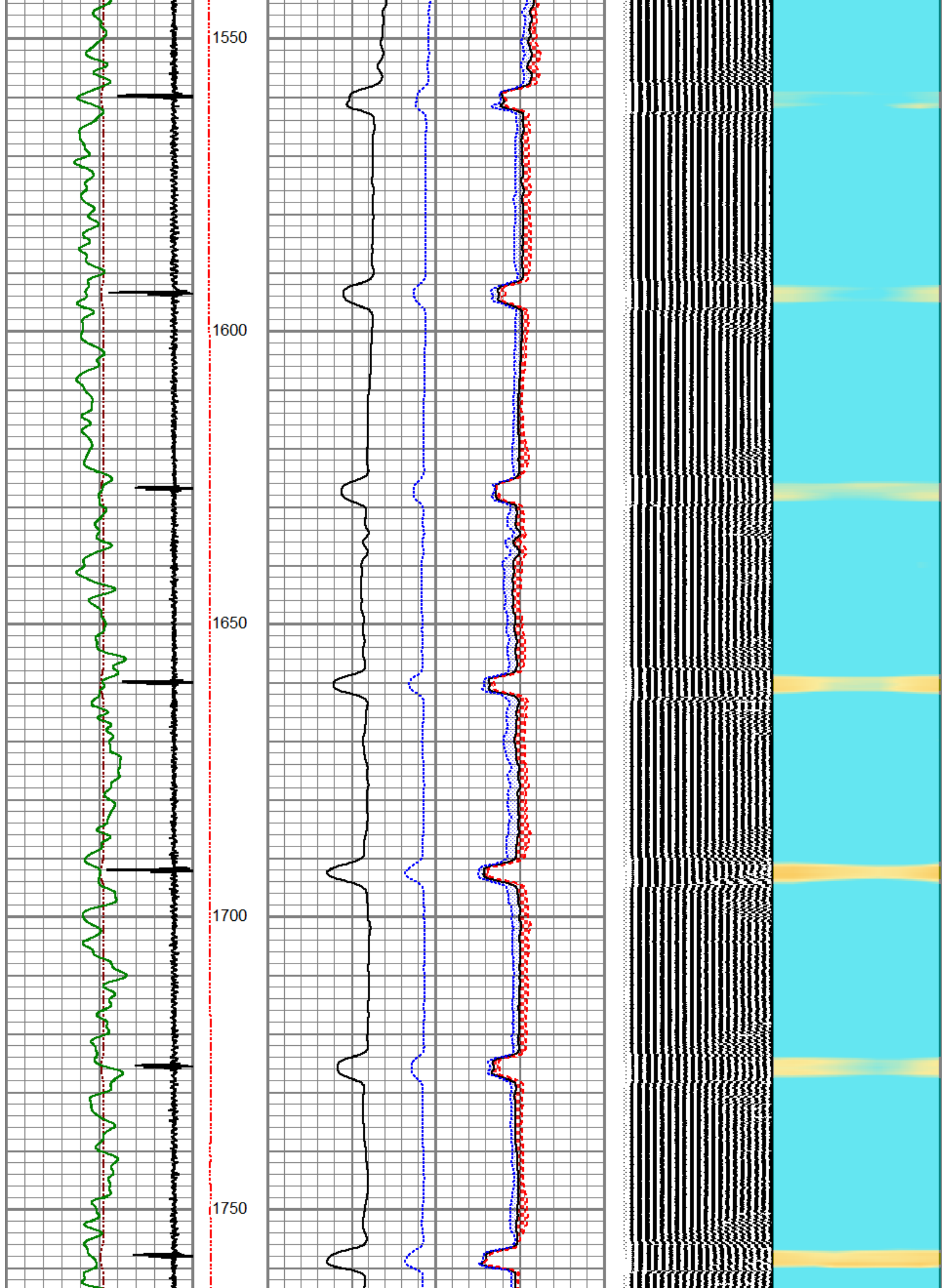


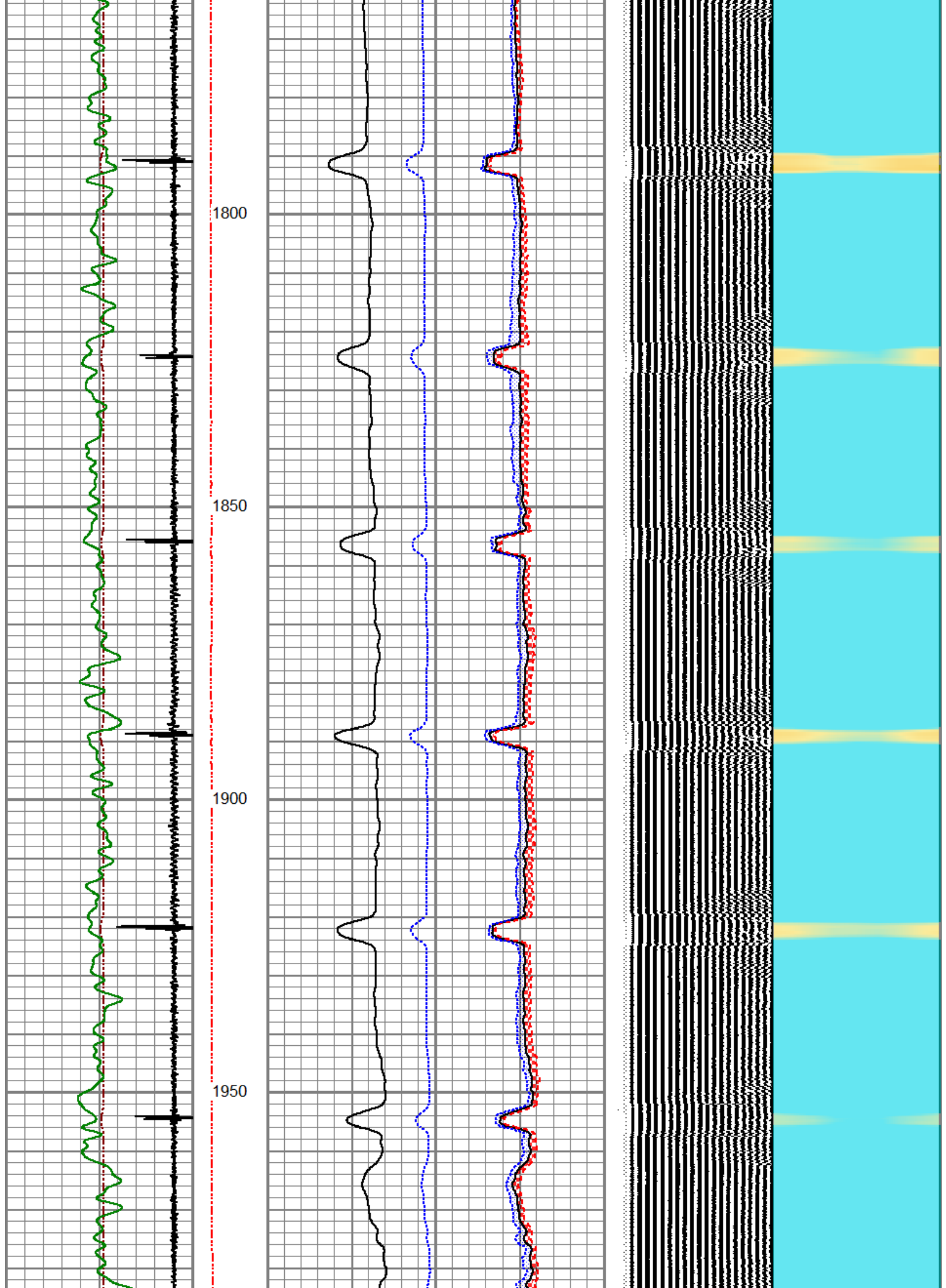


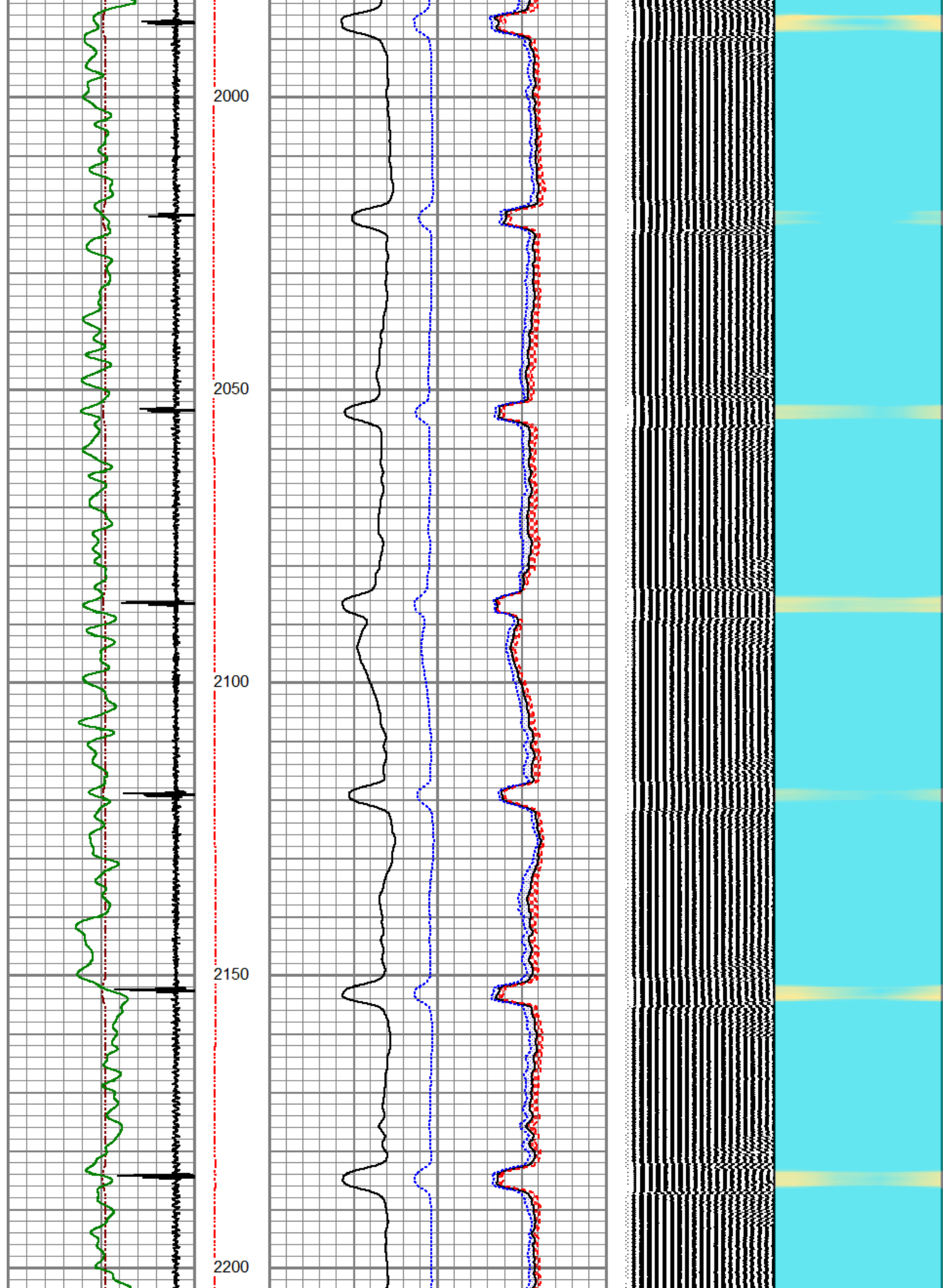


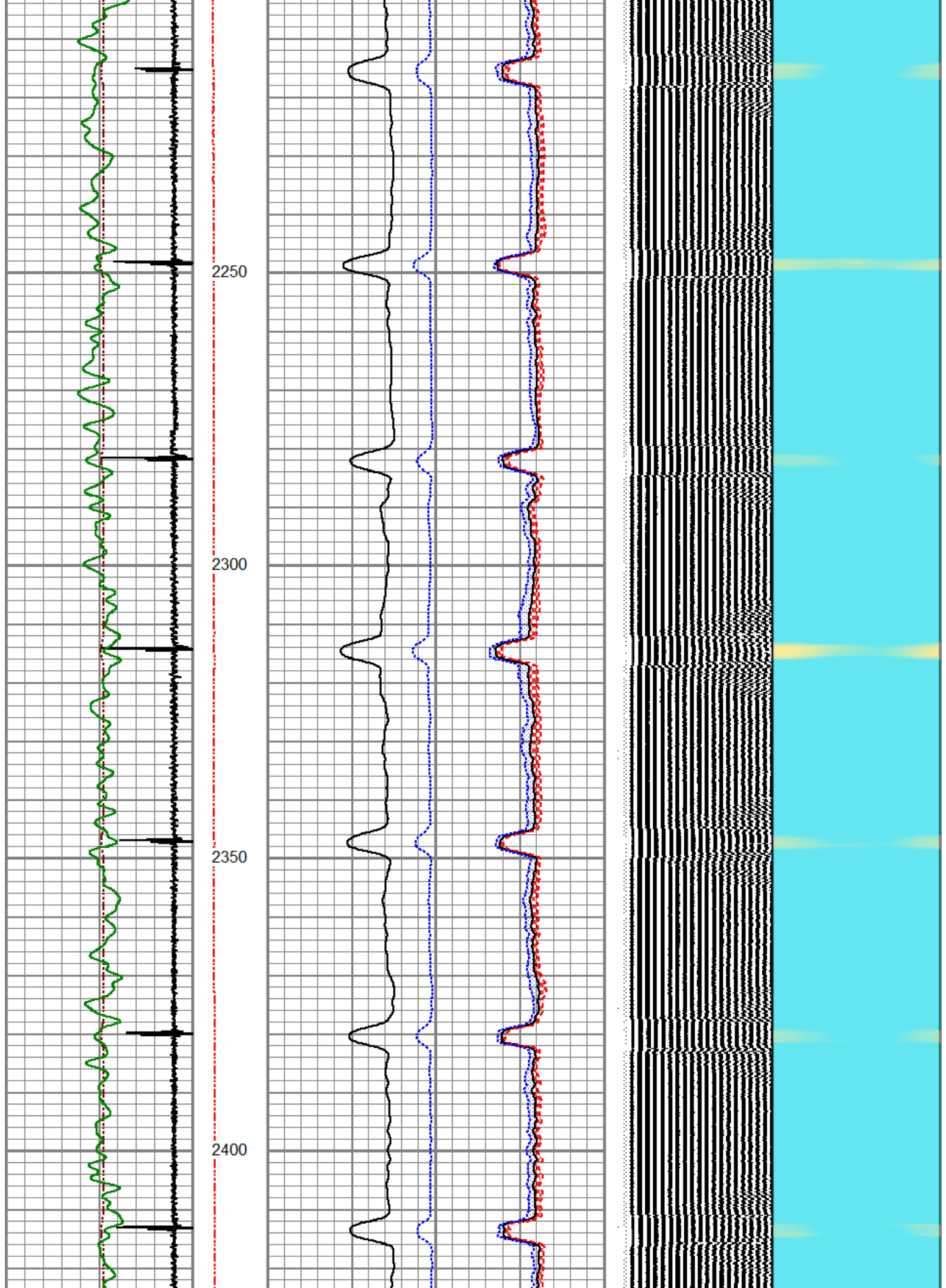


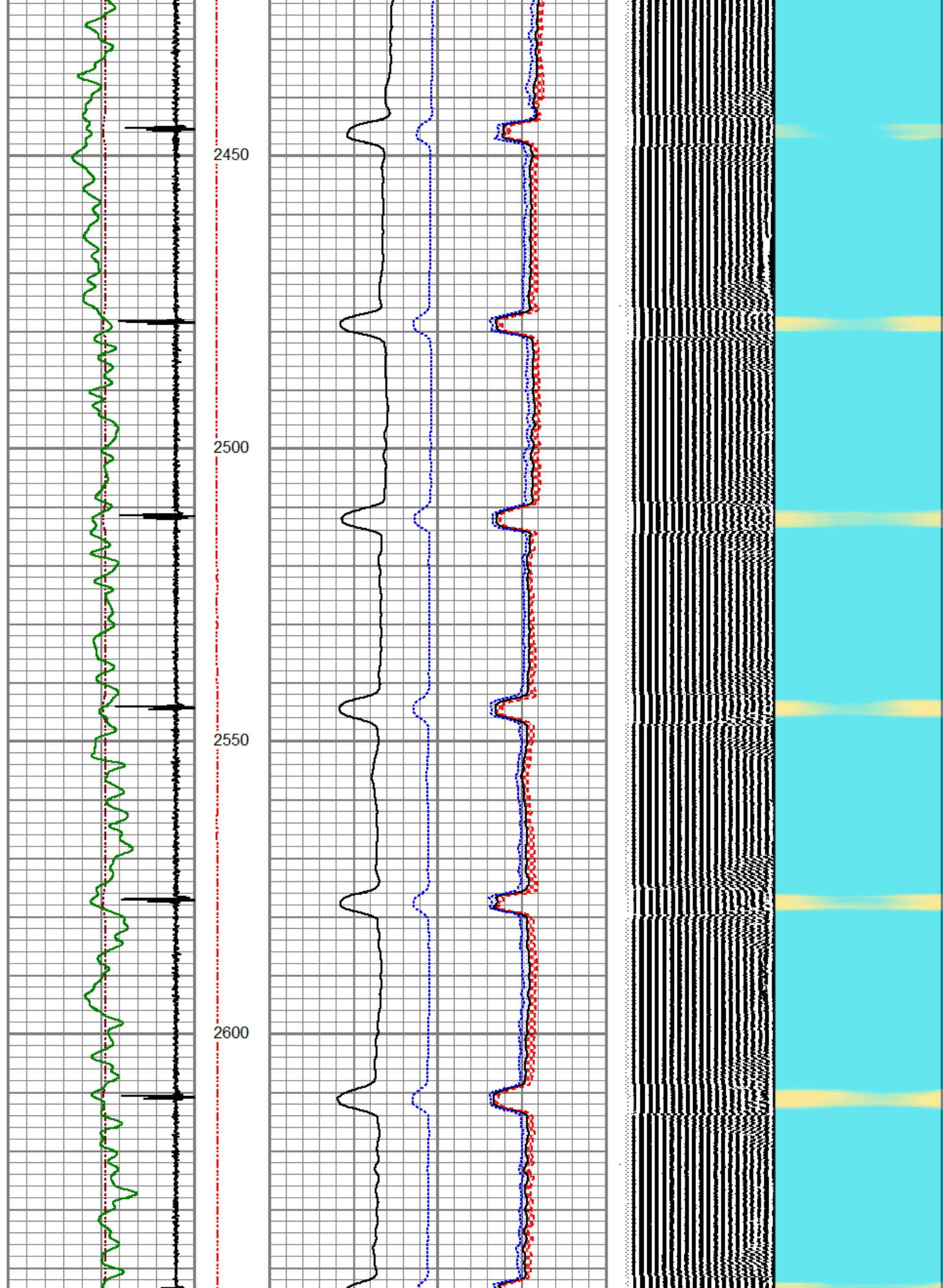


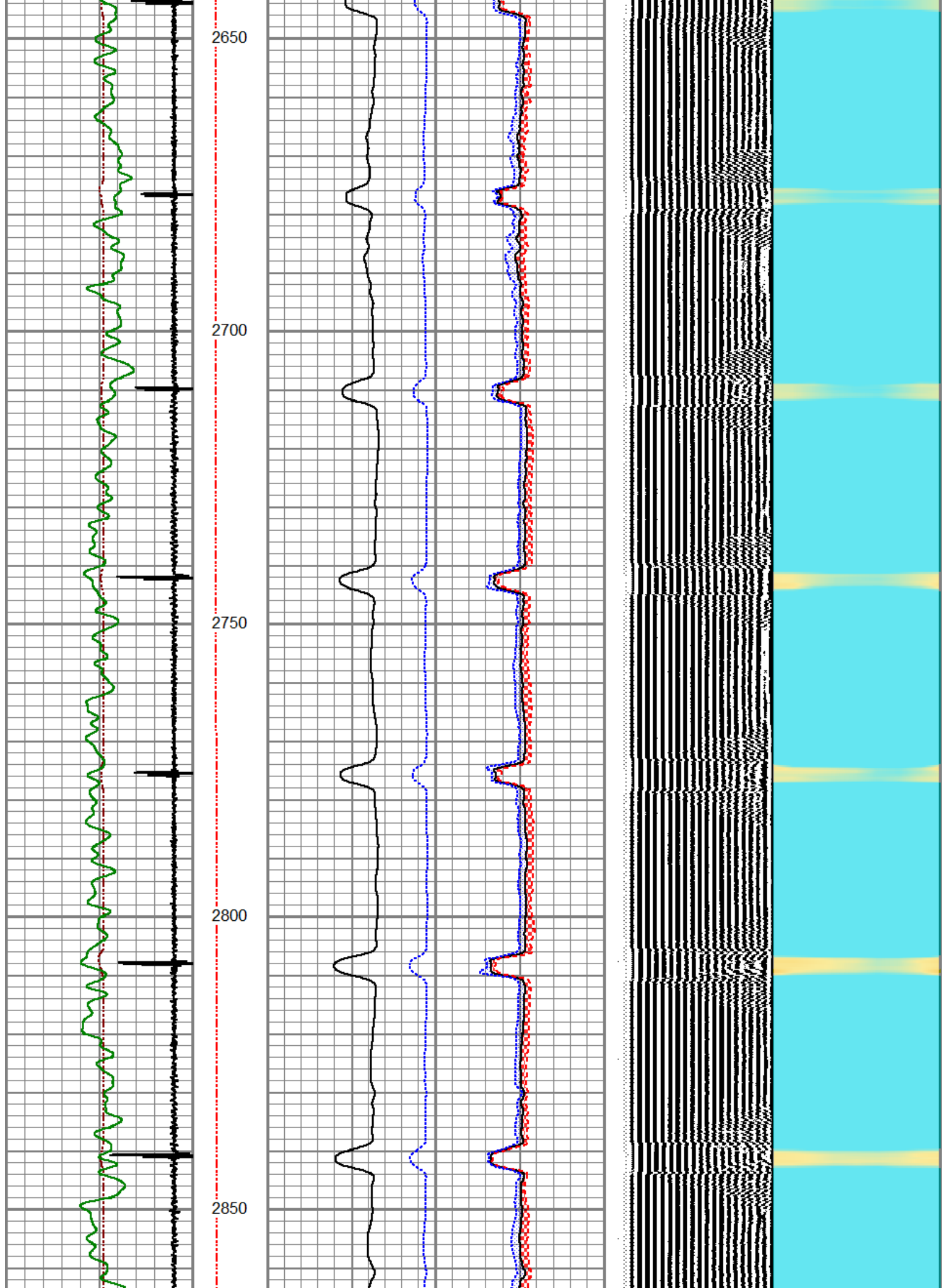


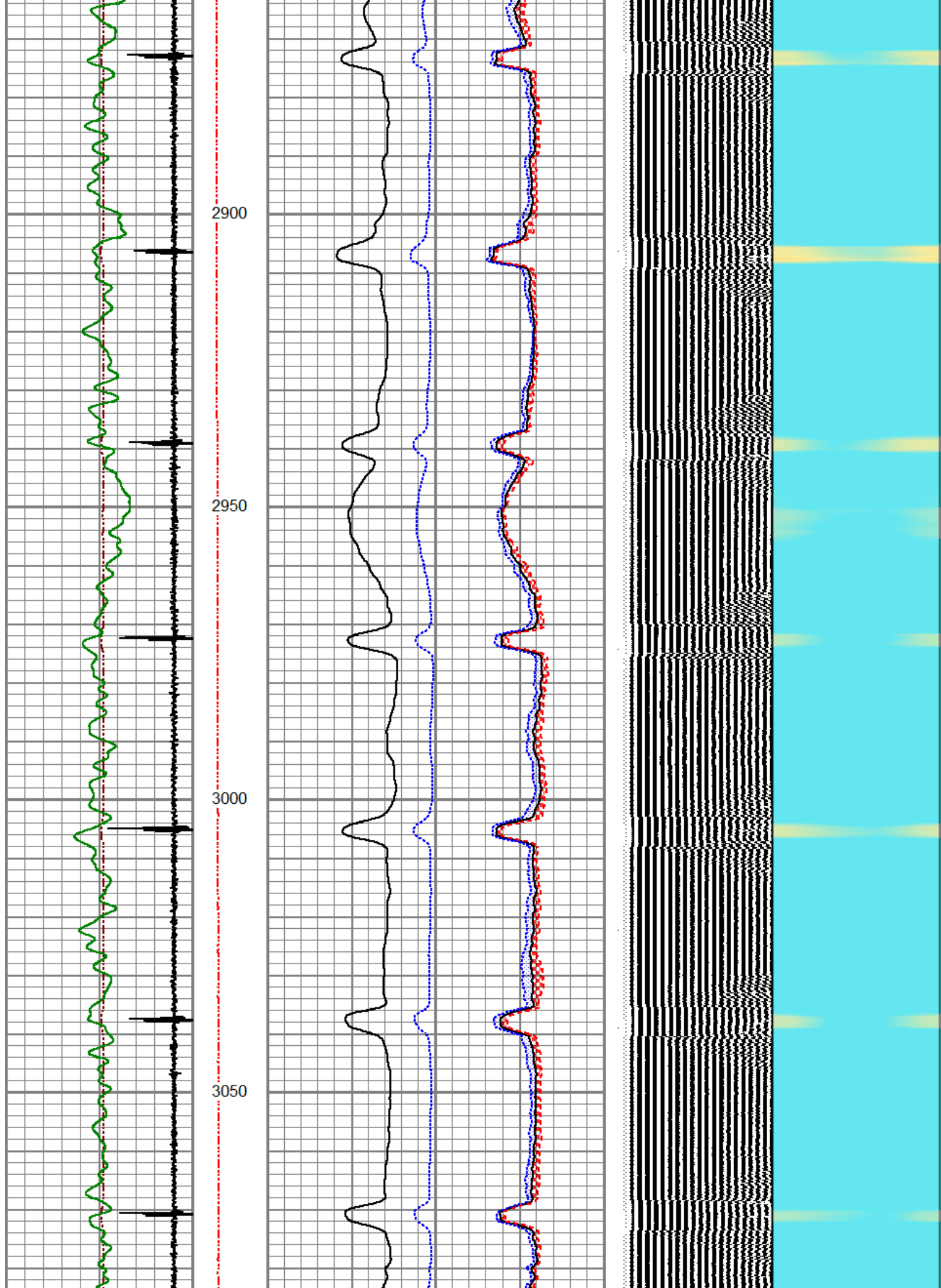


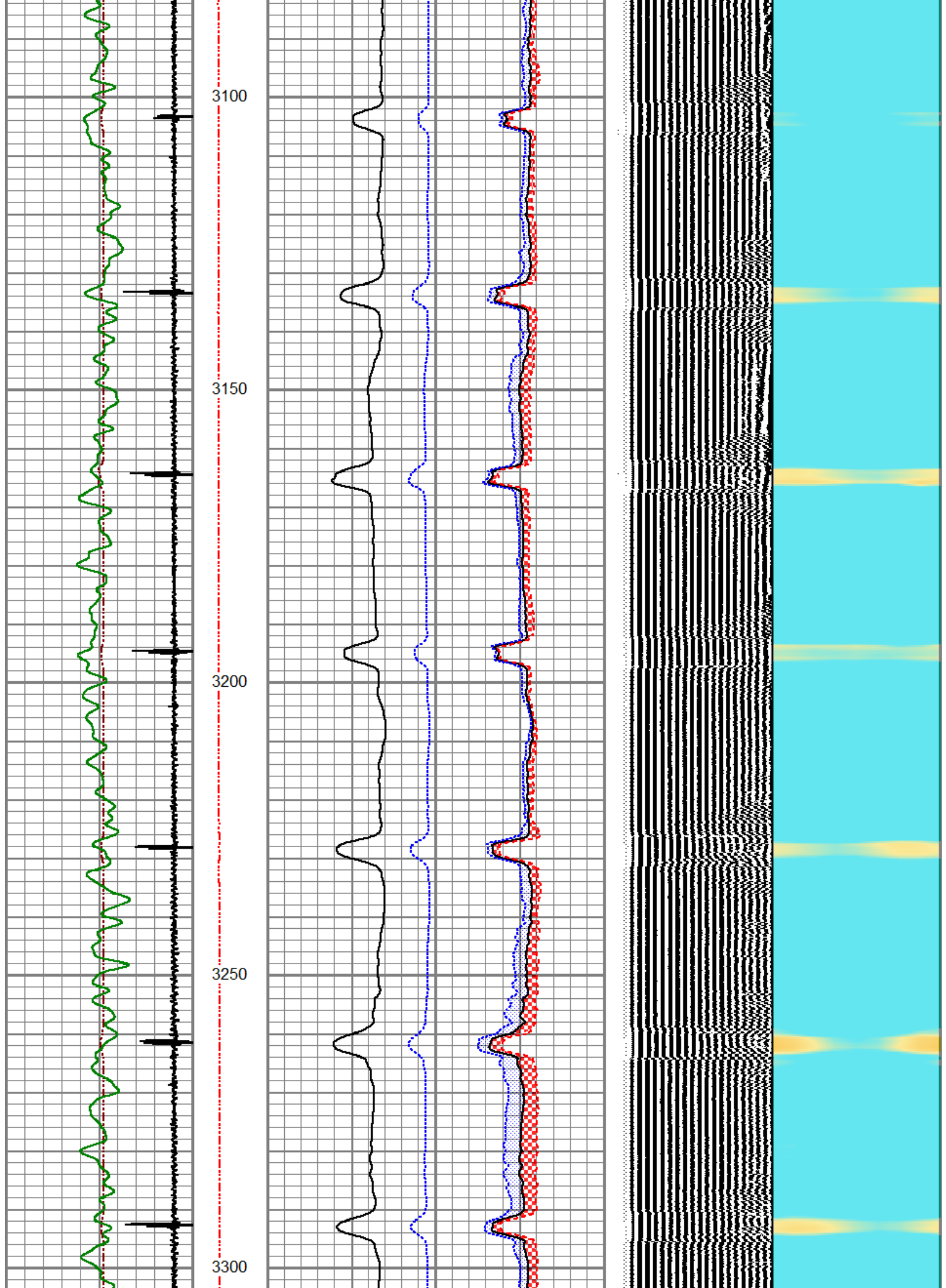


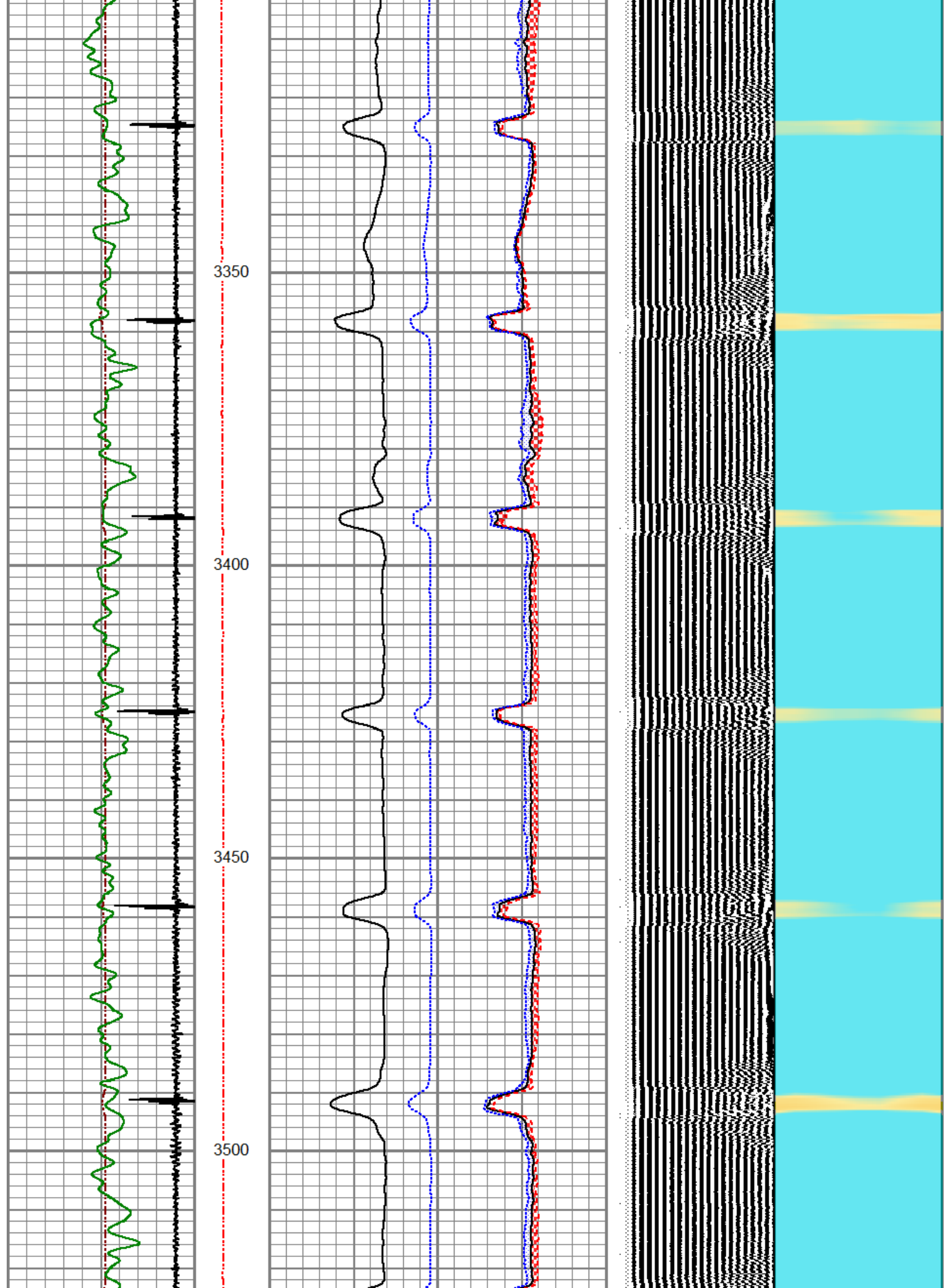


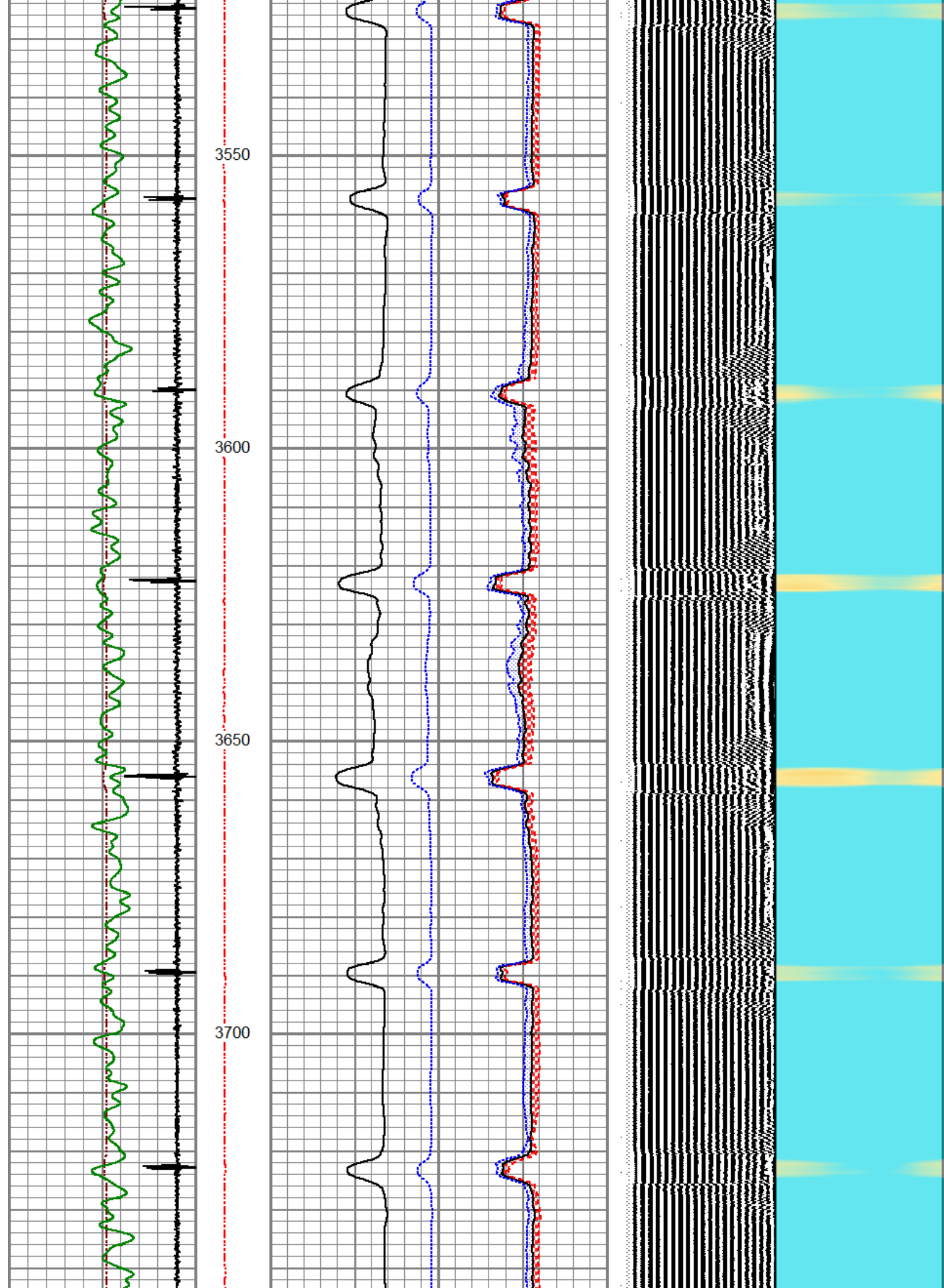


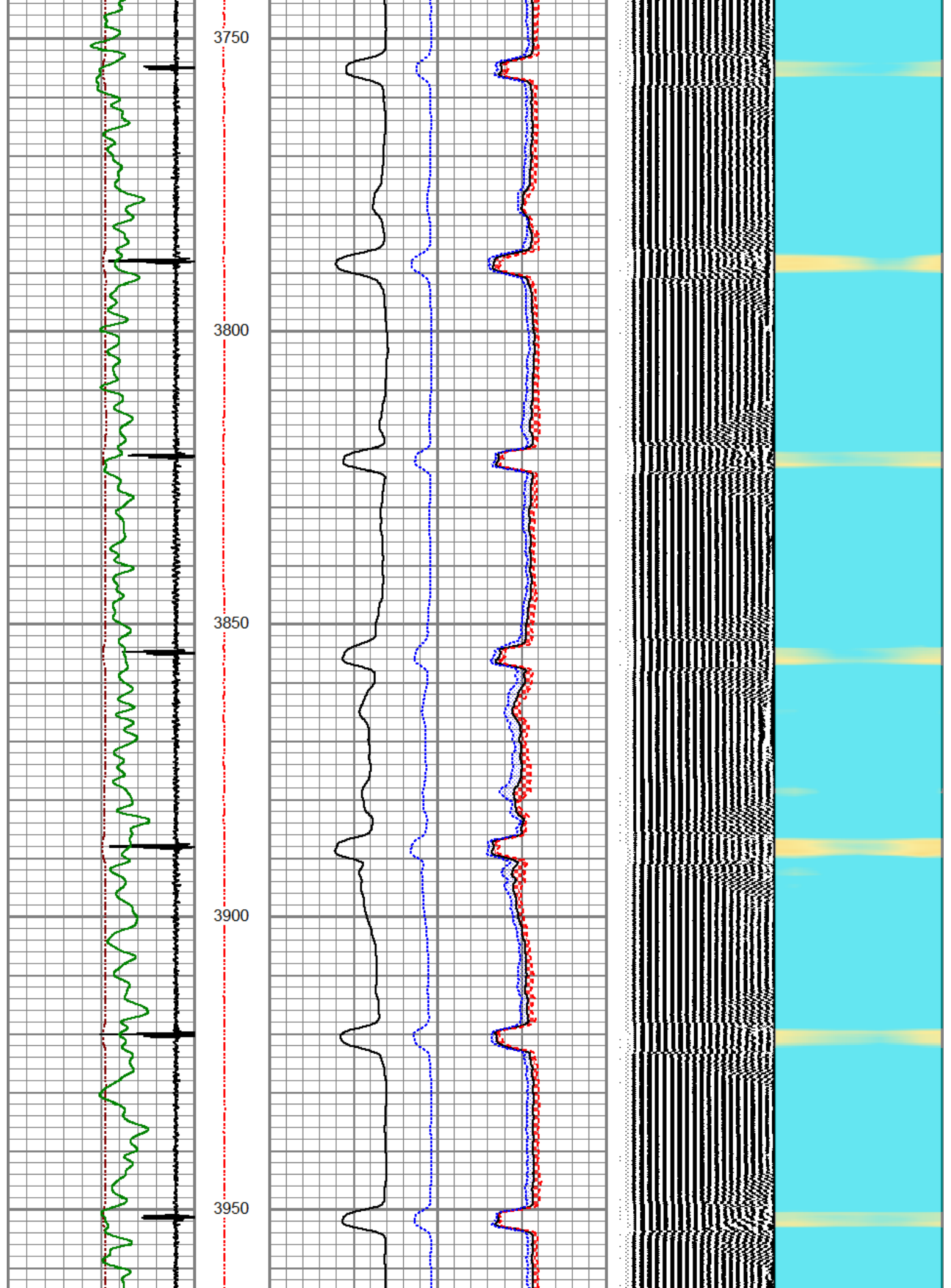


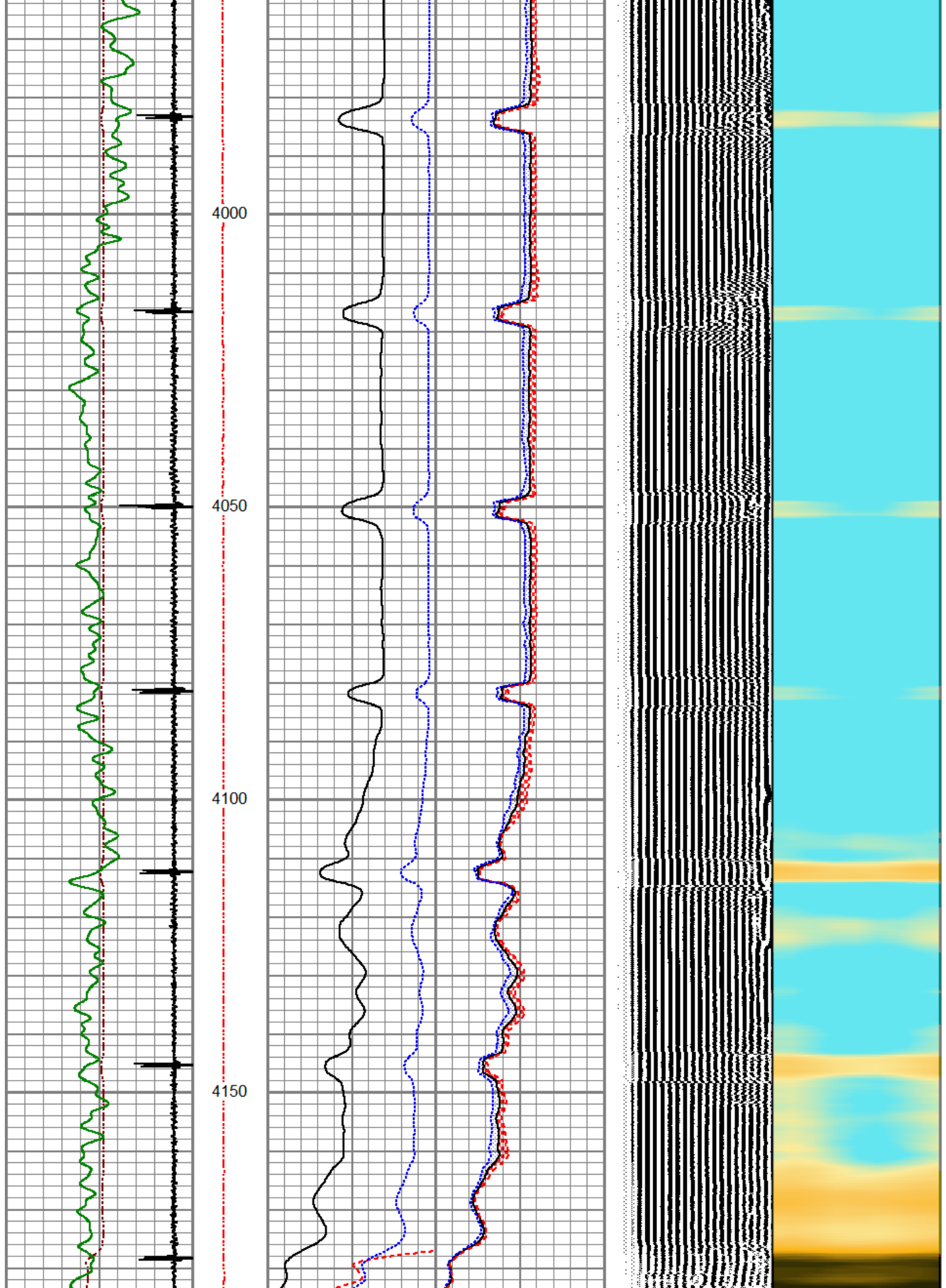


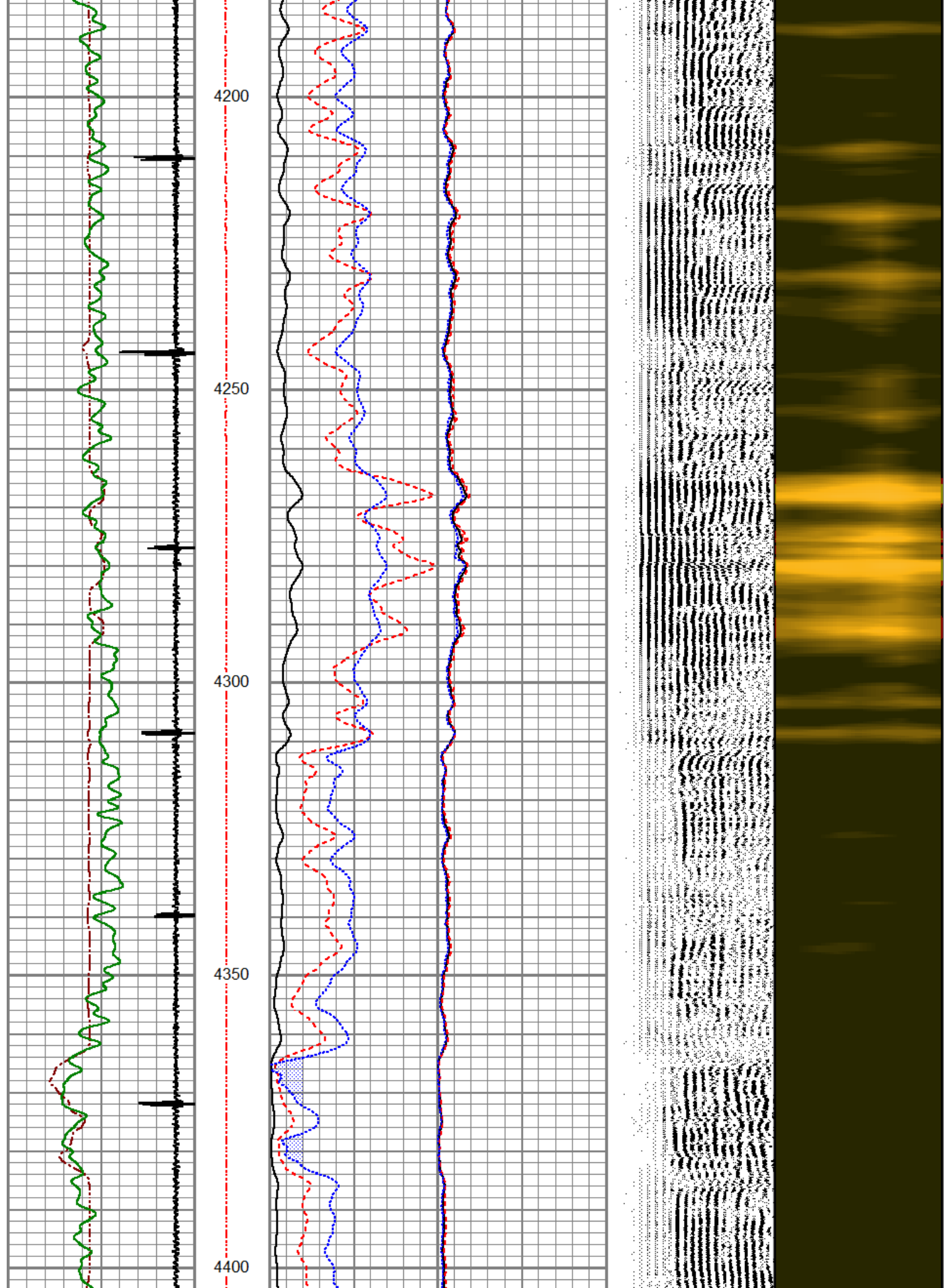


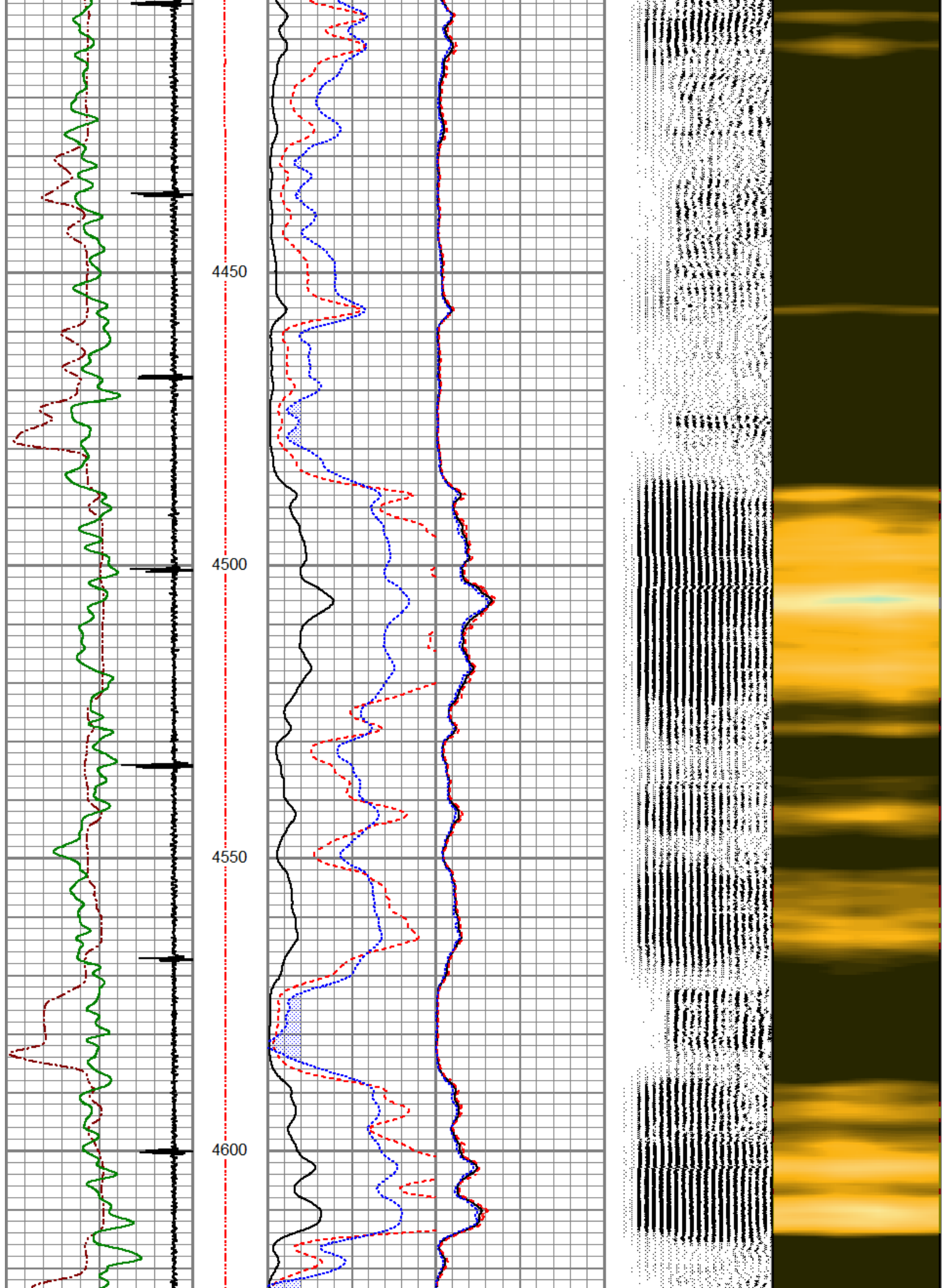


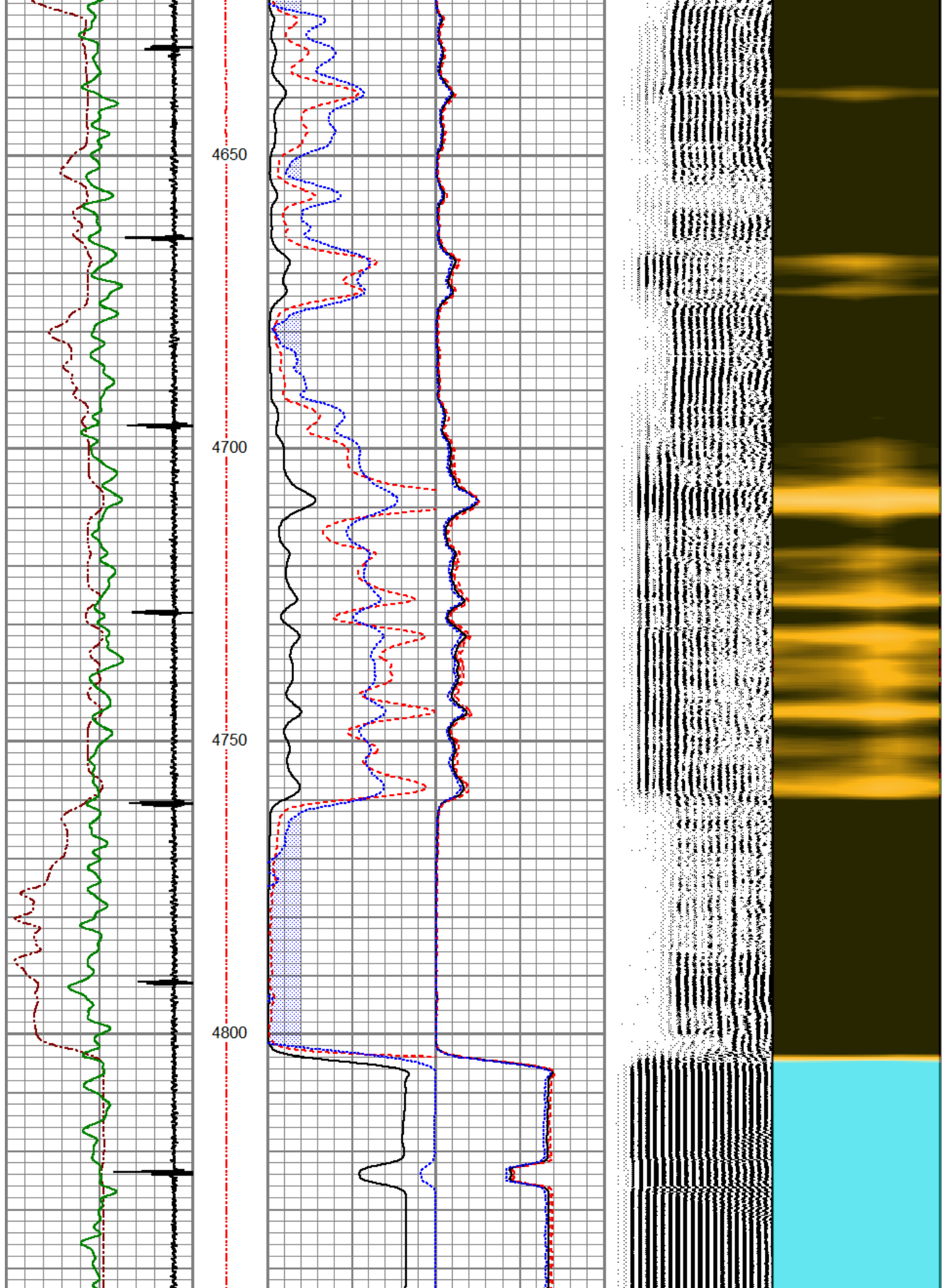


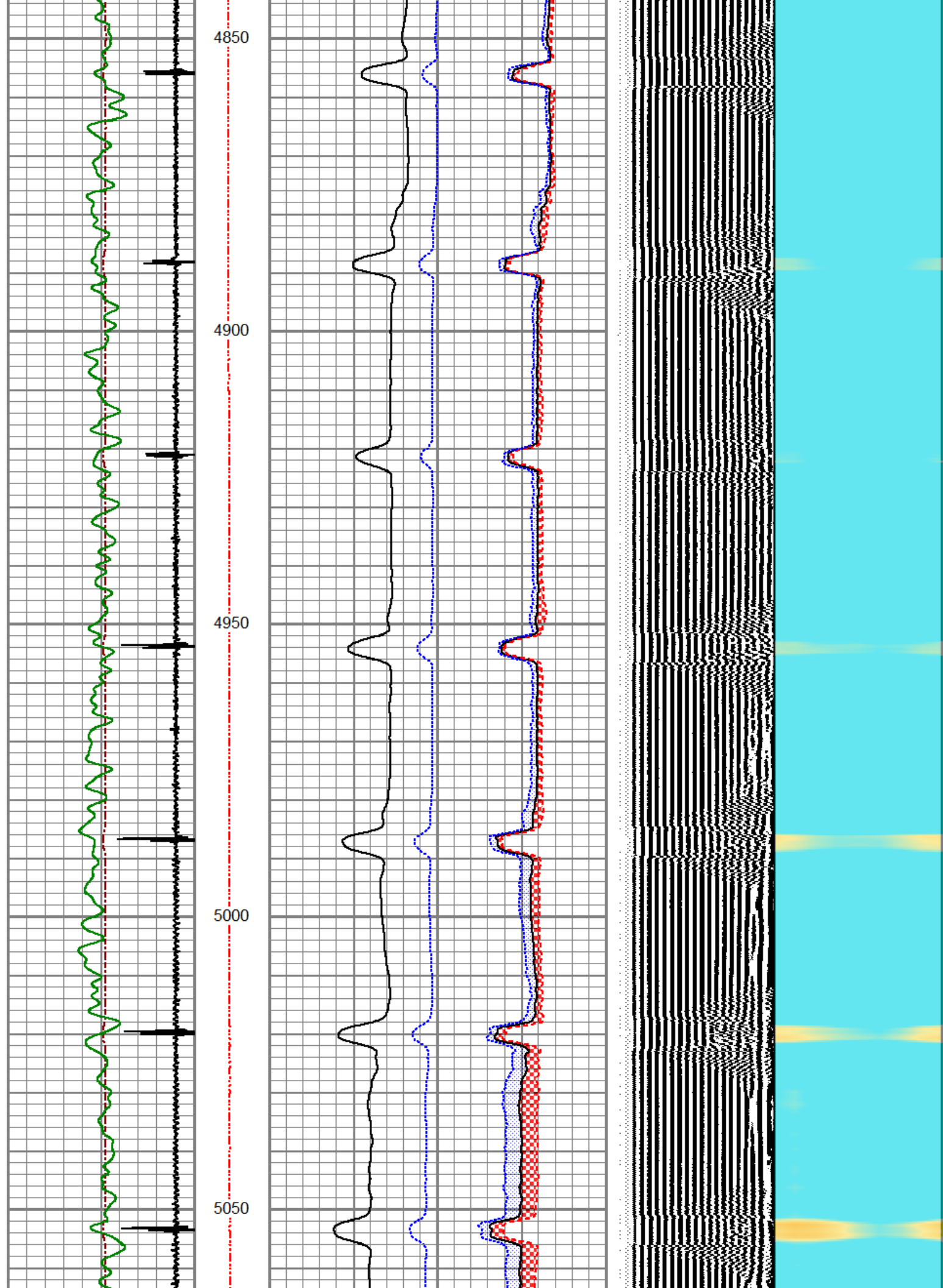


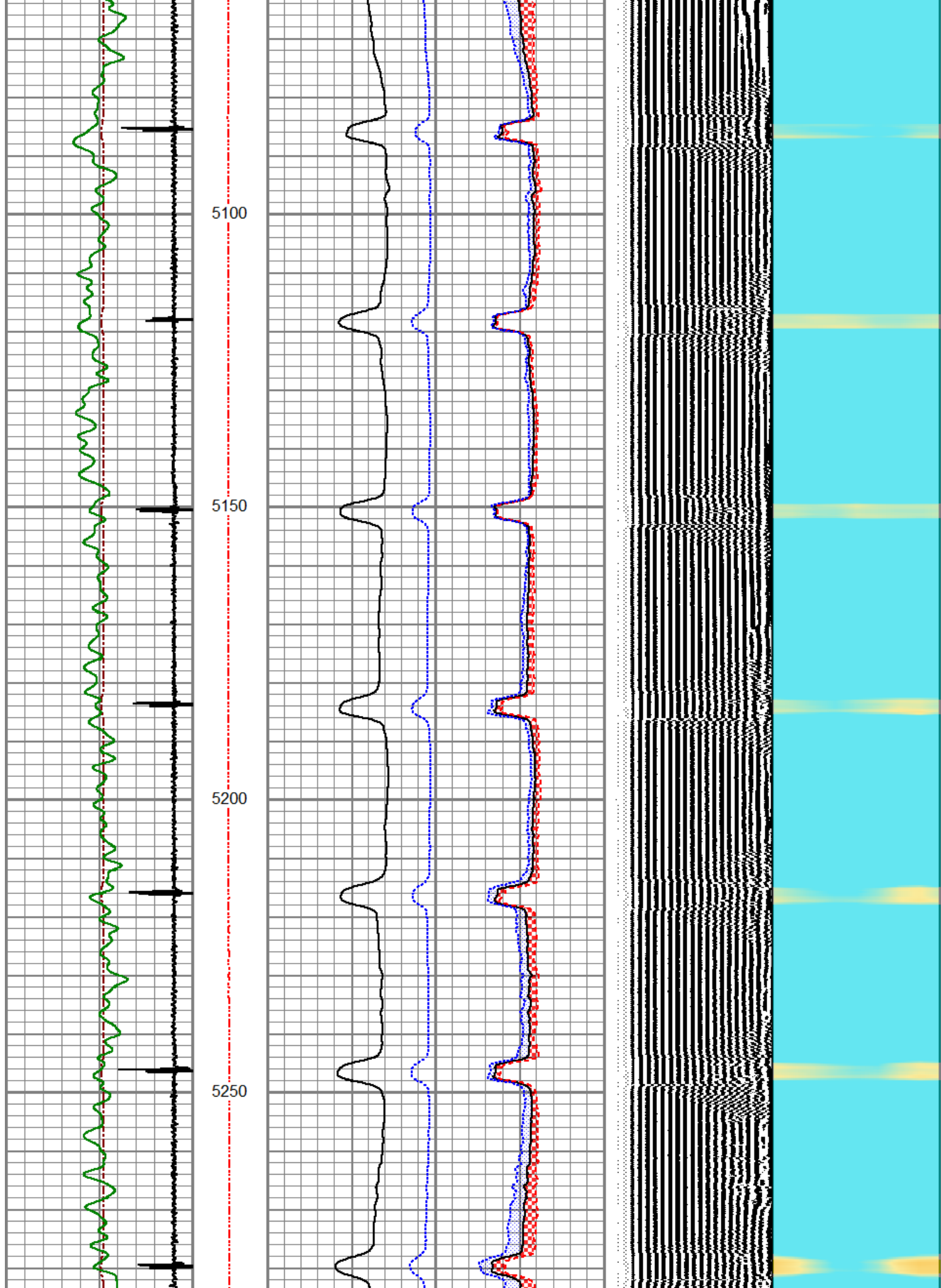


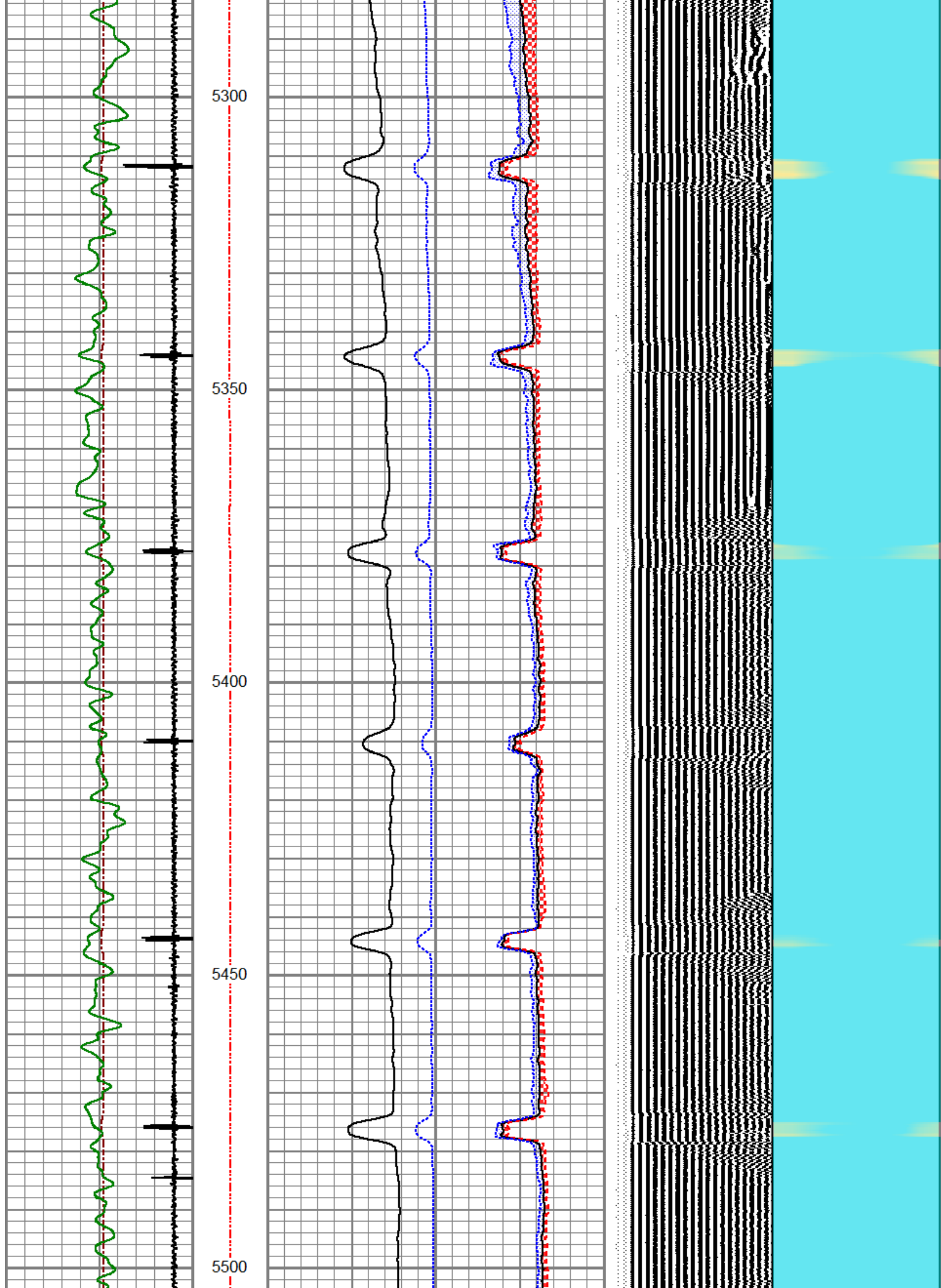


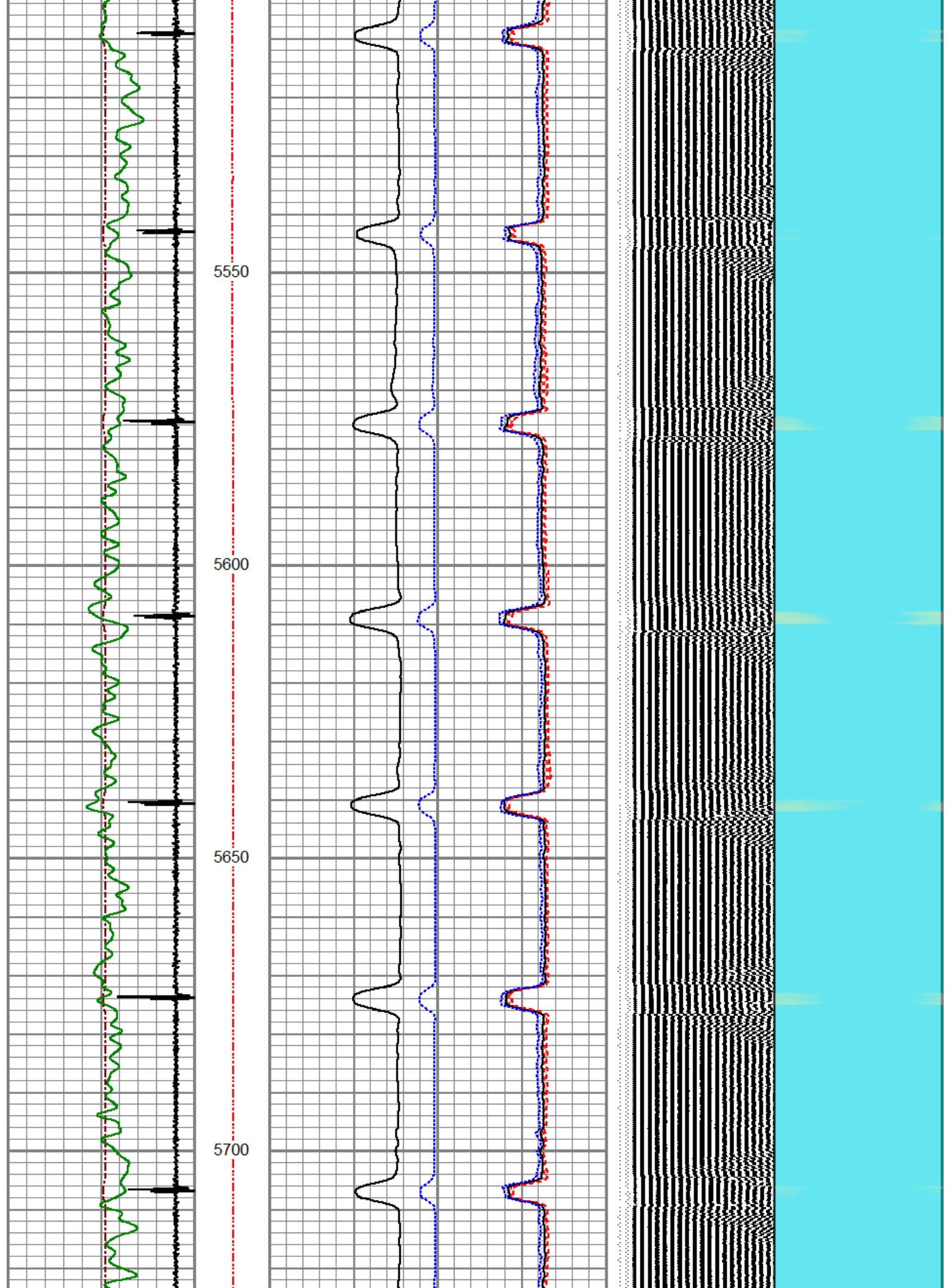


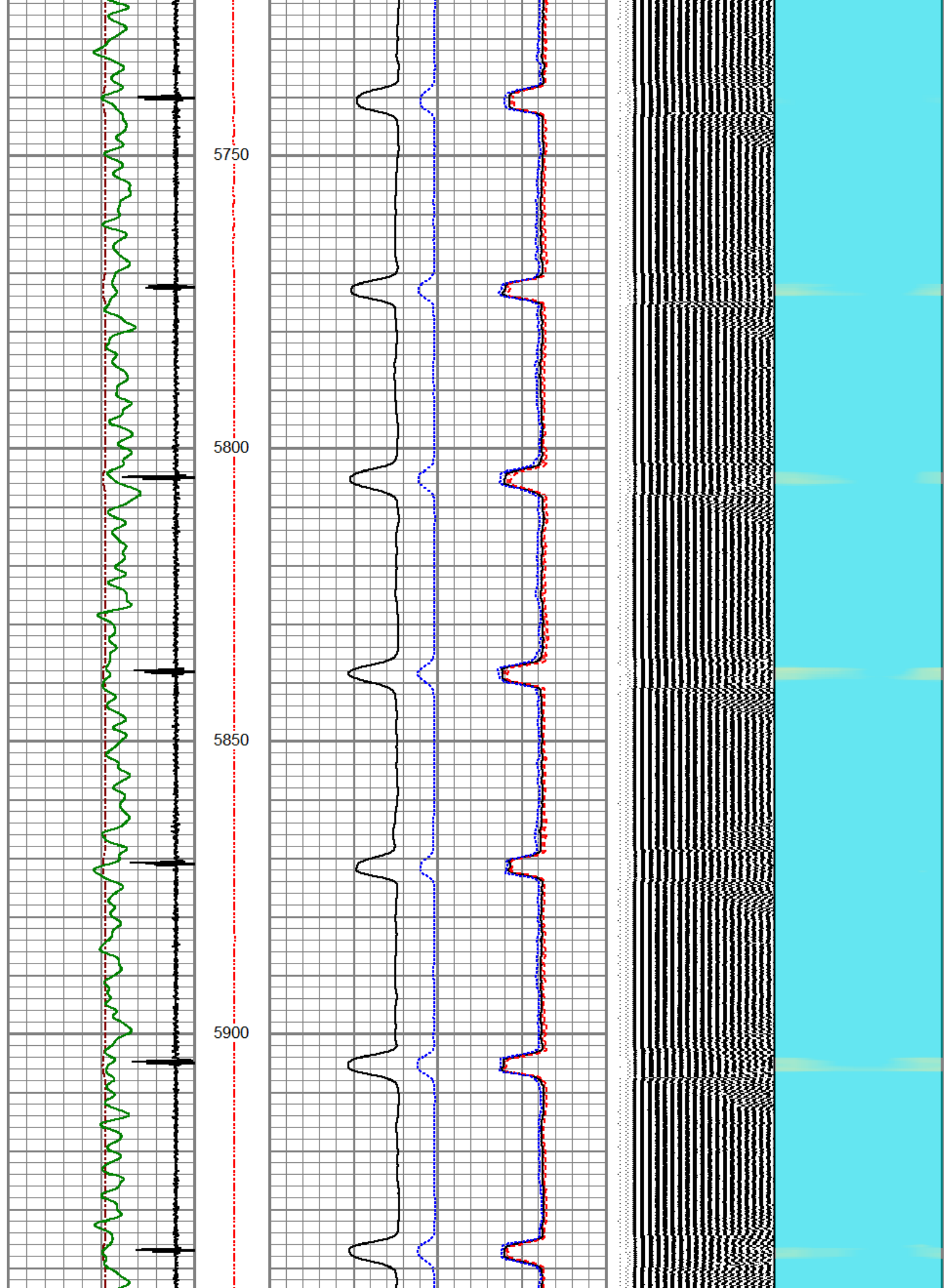


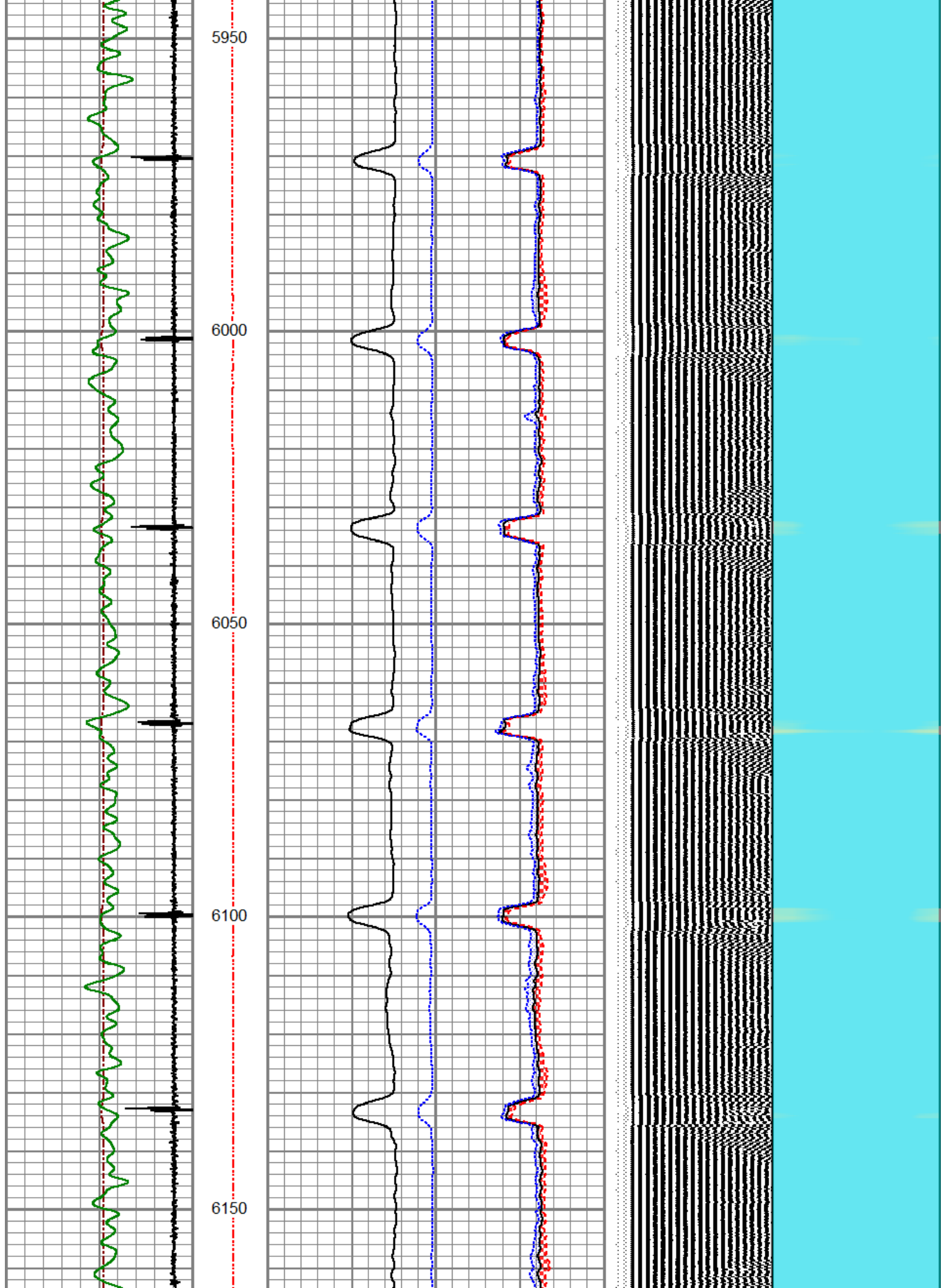


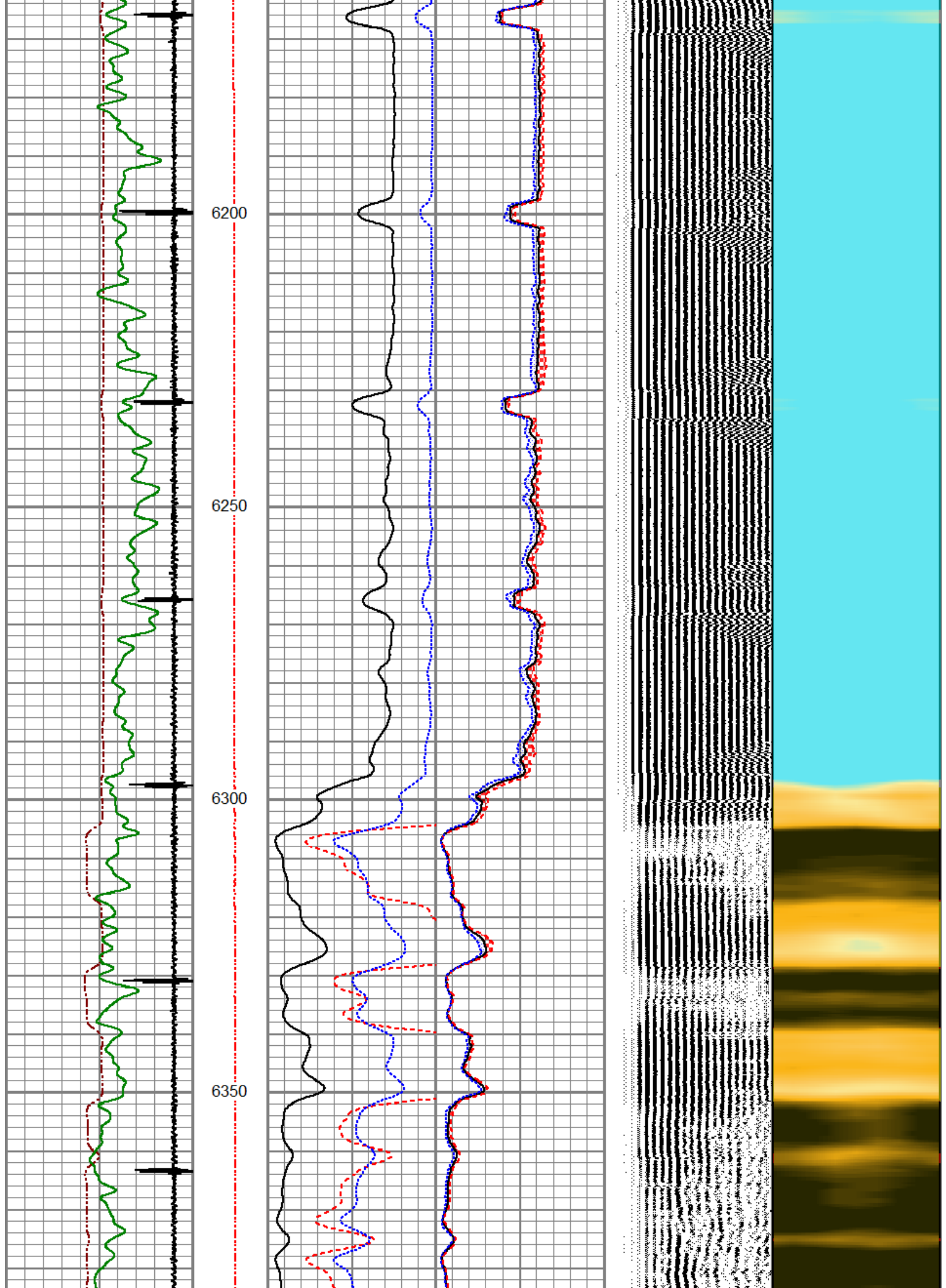


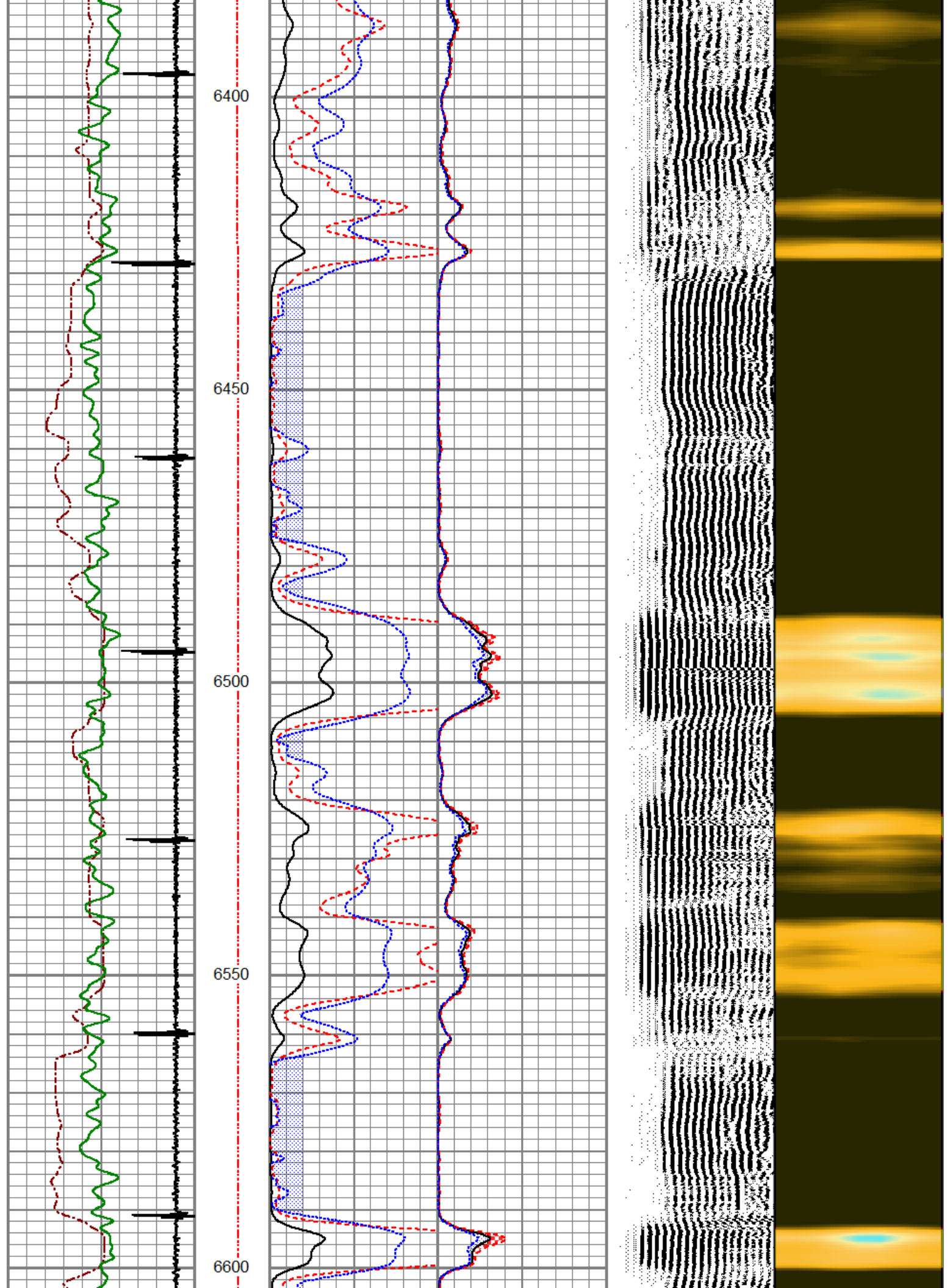


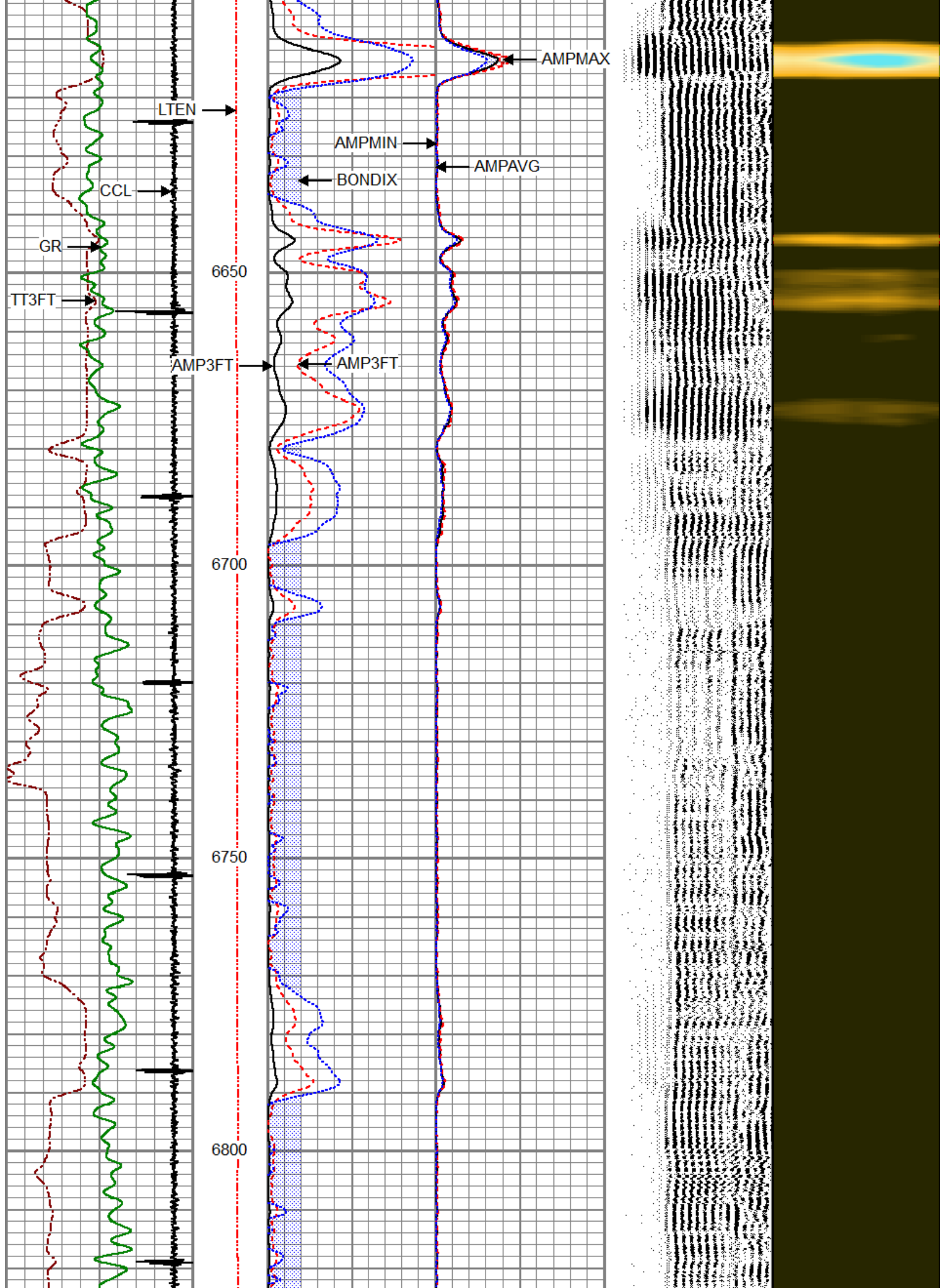


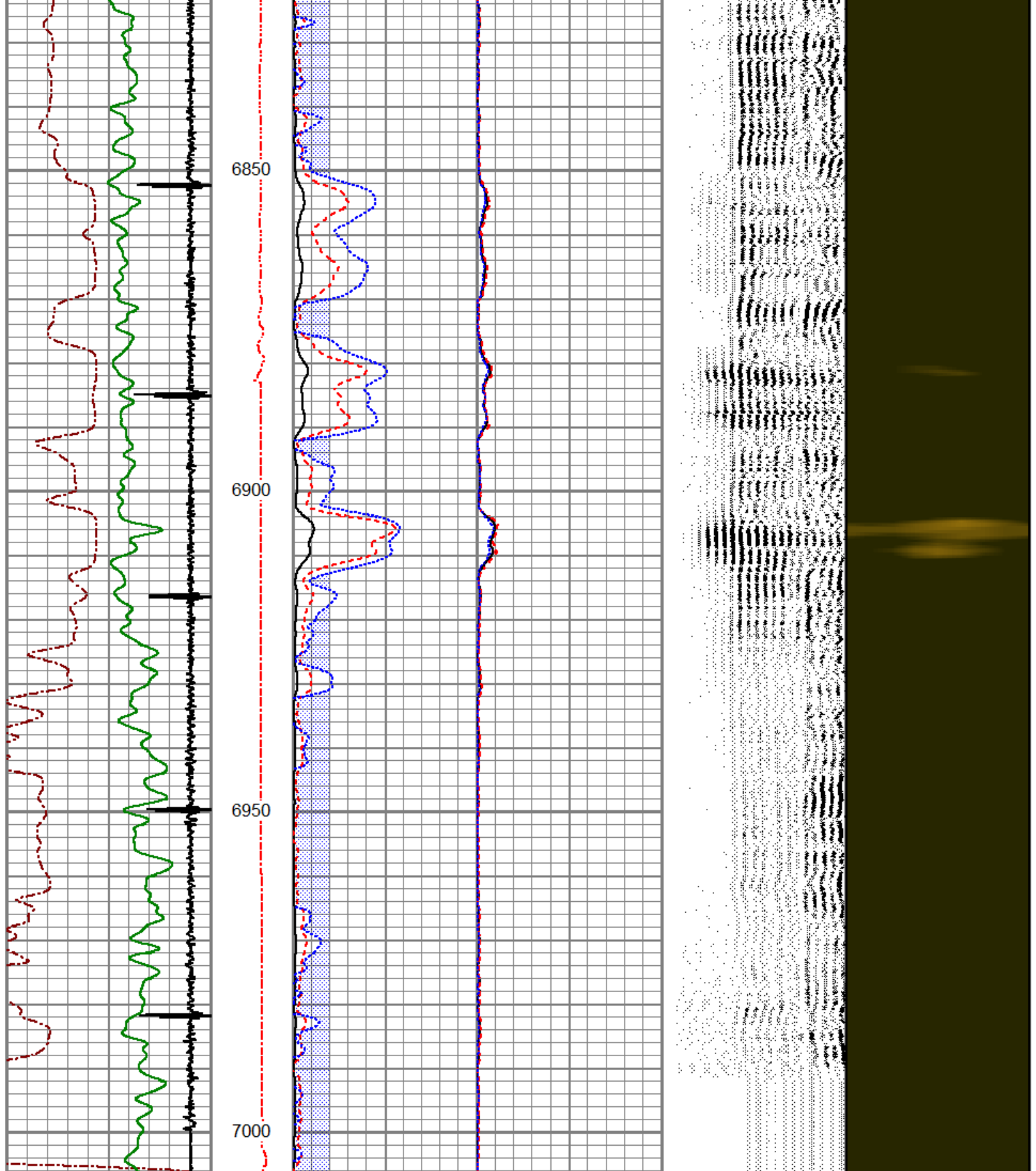












3Ft Travel Time (usec)	0	500	Line Tension (lb)	0	2000	3' Amplitude (mV)	0	100	Sector Amplitude Average	0	150	200	VDL (usec)	1200	1	Sector Map	8
Collar Locator	1	-9				3' Amplified Amplitude X 5 (mV)	0	20	Sector Amplitude Maximum	0	150						
Gamma Ray (GAPI)	150	0				Bond Index	0	1	Sector Amplitude Minimum	0	150						

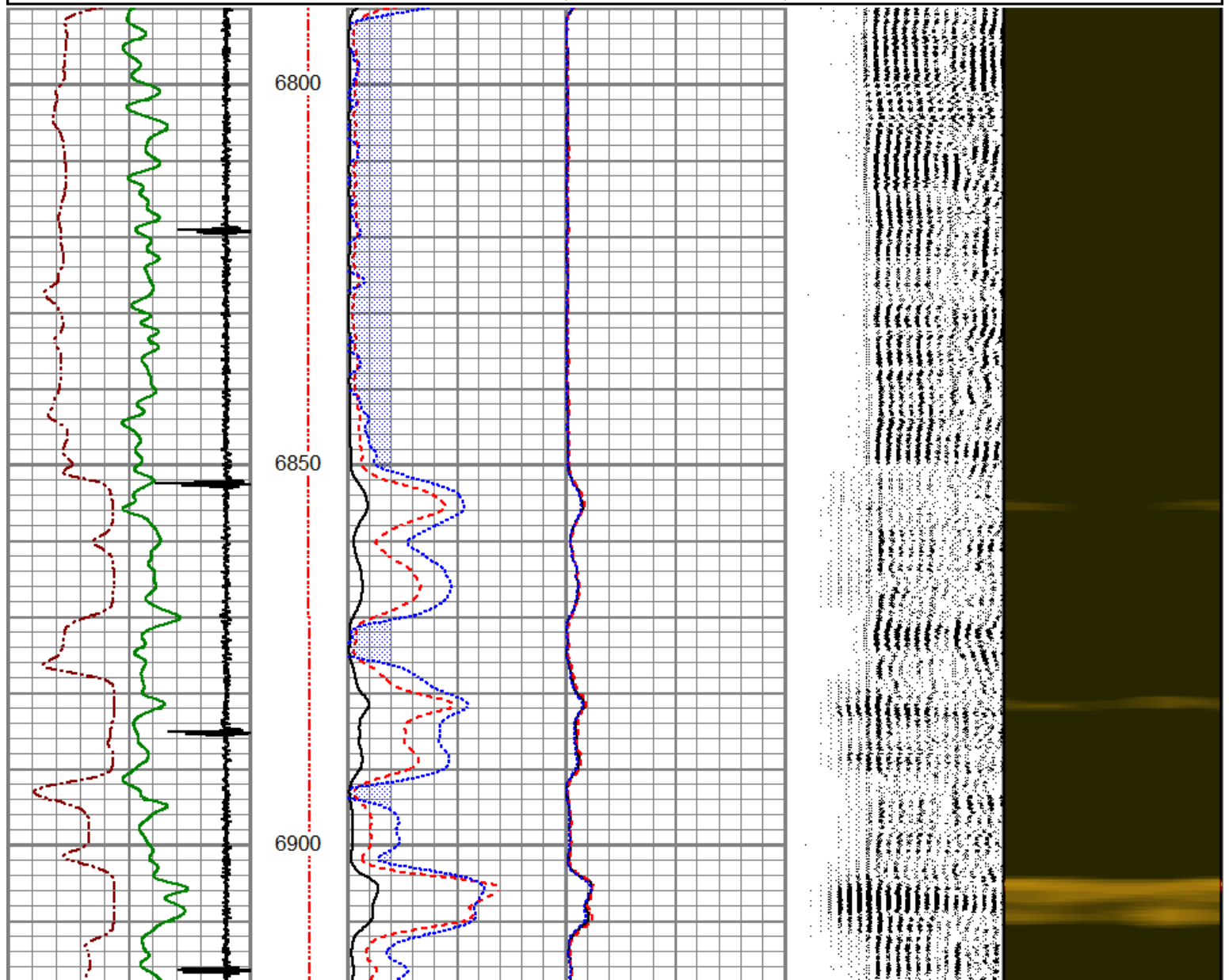


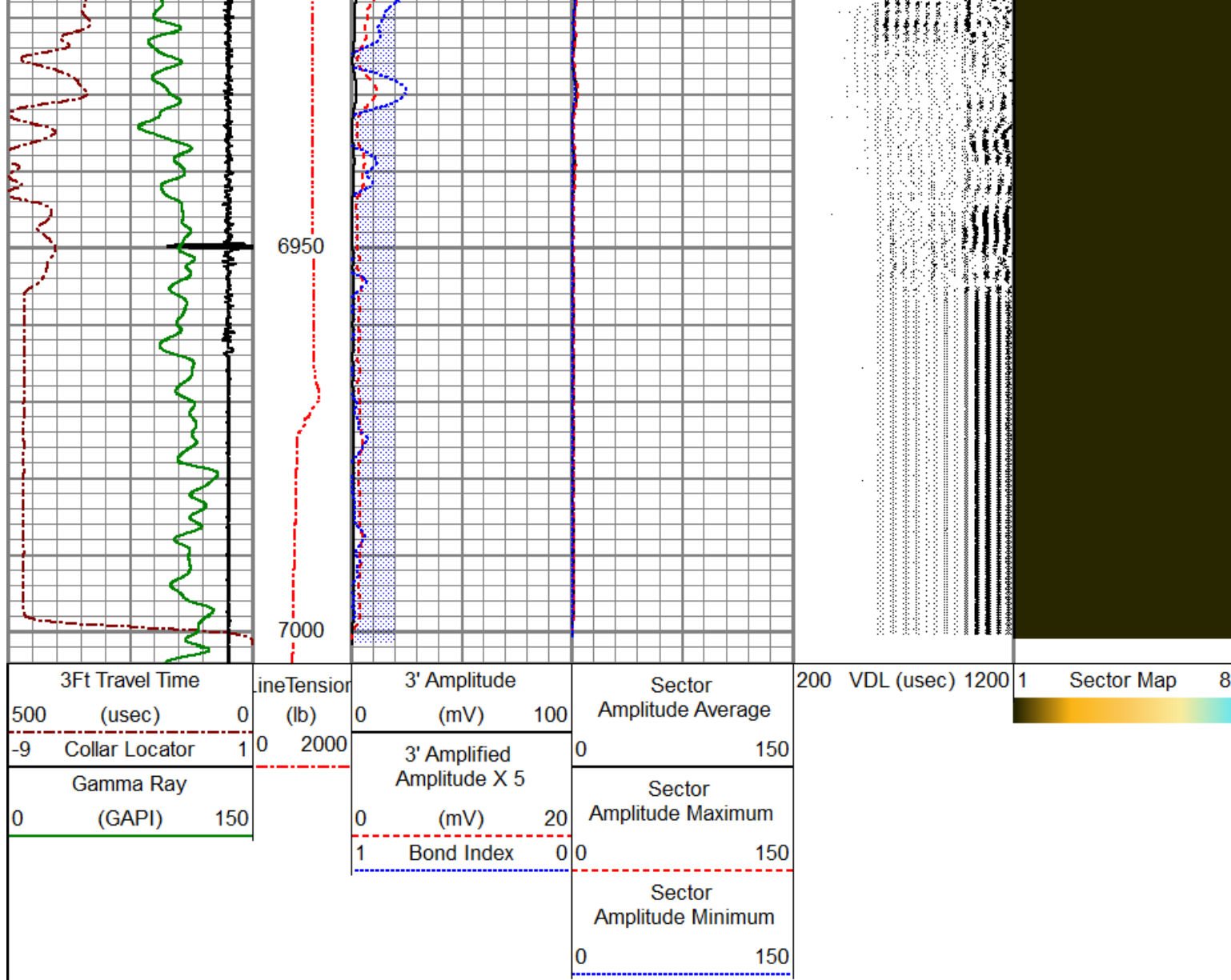
REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

Database File anadarko petroleum corp.db
Dataset Pathname pass15
Presentation Format pinr_scbl
Dataset Creation Wed Jul 31 11:32:43 2019
Charted by Depth in Feet scaled 1:240

3Ft Travel Time 500 (usec) -9 Collar Locator Gamma Ray 0 (GAPI) 150	Line Tension (lb) 0 2000	3' Amplitude (mV) 0 100 3' Amplified Amplitude X 5 (mV) 0 20 1 Bond Index 0	Sector Amplitude Average 0 150 Sector Amplitude Maximum 0 150 Sector Amplitude Minimum 0 150	200 VDL (usec) 1200	1 Sector Map 8
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Calibration Report

Database File: anadarko petroleum corp.db
 Dataset Pathname: pass17.3
 Dataset Creation: Wed Jul 31 13:03:31 2019

Gamma Ray Calibration Report

Serial Number: 130608
 Tool Model: 275 Probe GCT
 Performed: Sat Feb 23 12:39:33 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.6500 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 070132-T
 Tool Model: RBL-D

Calibration Casing Diameter: 4.500 in
 Calibration Depth: 2246.527 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	2.192	0.000	81.196	37.104	-0.149
CAL	0.000	1.523				
5'	0.001	1.556	0.000	81.196	52.209	-0.058
SUM						
S1	0.005	2.046	0.000	100.000	49.010	-0.259
S2	0.003	2.076	0.000	100.000	48.249	-0.150
S3	0.004	2.116	0.000	100.000	47.353	-0.206
S4	0.001	2.240	0.000	100.000	44.674	-0.051
S5	0.006	2.417	0.000	100.000	41.485	-0.256
S6	0.009	2.434	0.000	100.000	41.228	-0.357
S7	0.008	2.338	0.000	100.000	42.903	-0.322
S8	0.006	2.122	0.000	100.000	47.261	-0.285

Air Zero Calibration, performed Wed Jul 31 09:41:27 2019:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	



Company	ANADARKO PETROLEUM CORP.
Well	UPRR 42 PAN AM V 1
Field	WATTENBERG
County	WELD
State	COLORADO